MMWR™

Morbidity and Mortality Weekly Report

Weekly April 18, 2003 / Vol. 52 / No. 15

Advancing HIV Prevention: New Strategies for a Changing Epidemic — United States, 2003

In several U.S. cities, recent outbreaks of primary and secondary syphilis among men who have sex with men (MSM) (*1*) and increases in newly diagnosed human immunodeficiency virus (HIV) infections among MSM and among heterosexuals have created concern that HIV incidence might be increasing. In addition, declines in HIV morbidity and mortality during the late 1990s attributable to combination antiretroviral therapy appear to have ended. Until now, CDC has mainly targeted its prevention efforts at persons at risk for becoming infected with HIV by providing funding to state and local health departments and nongovernmental community-based organizations (CBOs) for programs aimed at reducing sexual and drug-using risk behavior. Some recent programs have focused on prevention efforts for persons living with HIV (*2*). Funding HIV-prevention programs for communities heavily affected by HIV has promoted community support for prevention activities. At the same time, these communities recognize the need for new strategies for combating the epidemic. In addition, the recent approval of a simple rapid HIV test in the United States creates an opportunity to overcome some of the traditional barriers to early diagnosis and treatment of infected persons. Therefore, CDC, in partnership with other U.S. Department of Health and Human Services agencies and other government agencies and nongovernment agencies will launch a new initiative in 2003, Advancing HIV Prevention: New Strategies for a Changing Epidemic.

Trends in HIV/AIDS Morbidity and Mortality

The first cases of acquired immunodeficiency syndrome (AIDS) were reported in the United States in June 1981, and the number of cases and deaths among persons with AIDS increased rapidly during the 1980s. During 1981–2001, an estimated 1.3–1.4 million persons in the United States were infected with HIV (*3*), and 816,149 cases of AIDS and 467,910 deaths were reported to CDC (*4*). During the late 1990s, after the introduction of combination antiretroviral therapy, the numbers of new AIDS cases and deaths among adults and adolescents declined substantially. From 1995 to 1998, the annual number of incident AIDS cases declined 38% from 69,242 to 42,832, and deaths from AIDS declined 63% from 51,670 to 18,823. The annual number of incident AIDS cases and deaths have remained stable since 1998, at approximately 40,000 and 16,000, respectively (*4*). The number of children in whom AIDS attributed to perinatal HIV transmission was diagnosed peaked in 1992 at 954 and declined 89% to 101 in 2001 (*4*).

Since the early 1990s, an estimated 40,000 new HIV infections have occurred annually in the United States. During 1999–2001, in the 25 states that had HIV reporting since 1994, the number of persons who had HIV infection newly diagnosed increased 14% among MSM and 10% among heterosexuals. The number of persons in the United States living

INSIDE

332 Update: Severe Acute Respiratory Syndrome — United States, 2003
336 Pneumoconiosis Prevalence Among Working Coal Miners Examined in Federal Chest Radiograph Surveillance Programs — United States, 1996–2002
340 Preliminary FoodNet Data on the Incidence of Foodborne Illnesses — Selected Sites, United States, 2002
343 Update: Adverse Events Following Civilian Smallpox Vaccination — United States, 2003

DEPARTMENT OF HEALTH AND HUMAN SERVICES
CENTERS FOR DISEASE CONTROL AND PREVENTION

The *MMWR* series of publications is published by the Epidemiology Program Office, Centers for Disease Control and Prevention (CDC), U.S. Department of Health and Human Services, Atlanta, GA 30333.

SUGGESTED CITATION
Centers for Disease Control and Prevention. [Article Title]. MMWR 2003;52:[inclusive page numbers].

Centers for Disease Control and Prevention
Julie L. Gerberding, M.D., M.P.H.
Director

David W. Fleming, M.D.
Deputy Director for Public Health Science

Dixie E. Snider, Jr., M.D., M.P.H.
Associate Director for Science

Epidemiology Program Office
Stephen B. Thacker, M.D., M.Sc.
Director

Office of Scientific and Health Communications
John W. Ward, M.D.
Director
Editor, MMWR *Series*

Suzanne M. Hewitt, M.P.A.
Managing Editor, MMWR *Series*

David C. Johnson
(*Acting*) *Lead Technical Writer/Editor*

Jude C. Rutledge
Teresa F. Rutledge
Jeffrey D. Sokolow, M.A.
Writers/Editors

Lynda G. Cupell
Malbea A. Heilman
Visual Information Specialists

Quang M. Doan
Erica R. Shaver
Information Technology Specialists

Division of Public Health Surveillance and Informatics
Notifiable Disease Morbidity and 122 Cities Mortality Data
Robert F. Fagan
Deborah A. Adams
Felicia J. Connor
Lateka Dammond
Patsy A. Hall
Pearl C. Sharp

with HIV continues to increase, and of an estimated 850,000–950,000 persons living with HIV, an estimated 180,000–280,000 (25%) persons are unaware of their serostatus (*3*).

HIV Testing

Many HIV-infected persons do not get tested until late in their infection, and many persons who are tested do not return to learn their test results. In 2000, of an estimated two million CDC-funded tests for HIV, approximately 18,000 tests represented new HIV diagnoses. During 2000, of persons with positive tests for HIV, 31% did not return to learn their test results (CDC, unpublished data, 2000). Of 573 HIV-infected young MSM who were studied in six U.S. cities, 77% were unaware that they were infected (*5*). During 1994–1999, of 104,780 persons in whom HIV was diagnosed, AIDS was diagnosed in 43,089 (41%) persons within 1 year after their positive HIV test (*6*).

Reasons for HIV testing vary. In a study of 7,236 persons in whom HIV was newly diagnosed, the reason given most frequently (42%) for seeking the test was illness. Only 10% of HIV-infected men and 17% of HIV-infected women reported that they were tested primarily because the test was offered or recommended by a health-care facility or provider (CDC, unpublished data, 2002).

Many persons who learn that they are HIV infected adopt behaviors that might reduce the risk for transmitting HIV (*7*). In a study of 1,363 HIV-infected men and women, among the 69% who were sexually active during the preceding 12 months, 78%–96% used a condom at most recent anal or vaginal intercourse with a known HIV-negative partner, and 52%–86% reported condom use with a partner of unknown serostatus (CDC, unpublished data, 2002).

The development of new tests for HIV creates new prospects for expanding HIV testing to identify and treat HIV-infected persons earlier. The OraQuick® HIV rapid test (OraSure Technologies, Inc., Bethlehem, Pennsylvania) was approved by the Food and Drug Administration in November 2002 and categorized as a waived test under the Clinical Laboratory Improvement Amendments in January 2003. This simple, rapid test provides HIV results in 20 minutes, can be stored at room temperature, requires no special equipment, and can be performed outside clinical settings. Although the use of the OraQuick® test facilitates receipt of test results, HIV-positive test results will require confirmation by Western Blot or immunofluorescence assays.

Reported by: *RS Janssen, MD, IM Onorato, MD, Div of HIV/AIDS Prevention–Surveillance and Epidemiology; RO Valdiserri, MD, TM Durham, MS, WP Nichols, MPA, EM Seiler, MPA, HW Jaffe, MD, National Center for HIV, STD, and TB Prevention, CDC.*

Editorial Note: The new initiative, Advancing HIV Prevention: New Strategies for a Changing Epidemic, is aimed at reducing barriers to early diagnosis of HIV infection and increasing access to quality medical care, treatment, and ongoing prevention services. The HIV initiative emphasizes the use of proven public health approaches to reducing the incidence and spread of disease. As with other sexually transmitted diseases (STDs) or any other public health problem, principles commonly applied to prevent disease and its spread will be used, including appropriate routine screening, identification of new cases, partner notification, and increased availability of sustained treatment and prevention services for those infected.

Stable HIV-associated morbidity and mortality, concerns about possible increases in HIV incidence, and the recent availability of a simple, rapid HIV test combined with strong prevention collaborations among communities heavily affected by HIV support the need to reassess and refocus some of CDC's HIV-prevention activities. An emphasis on greater access to testing and on providing prevention and care services for persons infected with HIV can reduce new infections and lead to reductions in HIV-associated morbidity and mortality (*2,8*). In addition, simplifying prenatal and other testing procedures can lead to more effective use of resources that CDC provides to prevent perinatal and other HIV transmission.

The initiative consists of four key strategies:

- **Make HIV testing a routine part of medical care.** CDC will work with professional medical associations and other partners to ensure that all health-care providers include HIV testing, when indicated, as part of routine medical care on the same voluntary basis as other diagnostic and screening tests. Previously, CDC has recommended that patients be offered HIV testing in high HIV-prevalence acute care hospitals (*9*) and in clinical settings serving populations at increased risk (e.g., clinics that treat persons with STDs). This initiative adds to those recommendations to include offering HIV testing to all patients in all high HIV-prevalence clinical settings and to those with risks for HIV in low HIV-prevalence clinical settings (*10*). Because prevention counseling, although recommended for all persons at risk for HIV, should not be a barrier to testing, CDC will promote adoption of simplified HIV-testing procedures in medical settings that do not require prevention counseling before testing. In 2003, CDC will support state and local health departments in conducting demonstration projects offering HIV testing to all patients in high HIV-prevalence health-care settings and referral into care, treatment, and prevention services, and will assess the outcomes of these projects.

- **Implement new models for diagnosing HIV infections outside medical settings.** In 2003, CDC will fund new demonstration projects using OraQuick® to increase access to early diagnosis and referral for treatment and prevention services in high-HIV prevalence settings, including correctional facilities. In addition, CBOs will pilot new models, particularly in nonmedical settings, for diagnosis and referring persons for treatment and prevention services. Also, because 8%–39% of partners tested in studies of partner counseling and referral services (PCRS) were found to have previously undiagnosed HIV infection (*11*), CDC will increase emphasis on PCRS. In 2004, CDC will implement these new models through health departments and CBOs.

- **Prevent new infections by working with persons diagnosed with HIV and their partners.** Although many persons with HIV modify their behavior to reduce their risk for transmitting HIV after learning they are infected, some persons might require ongoing prevention services to change their risk behavior or to maintain the change. In 2003, CDC, in collaboration with the Health Resources and Services Administration (HRSA), the National Institutes of Health, and the HIV Medical Association of the Infectious Diseases Society of America, will publish *Recommendations for Incorporating HIV Prevention into the Medical Care of Persons with HIV Infection.* CDC will work with professional associations to disseminate the new guidelines to primary care providers and infectious disease specialists and to assess their integration into medical practice. CDC will work closely with HRSA and other partners to reach persons in whom HIV infection has been diagnosed but who are not in ongoing medical or preventive care. CDC also will conduct demonstration projects through state and local health departments to provide prevention case management for persons living with HIV to reduce HIV transmission. Finally, CDC will increase emphasis on partner notification and also will support new models of partner notification, including offering rapid HIV testing to partners and using peers to conduct partner prevention counseling and referral. In 2004, acting through health departments and CBOs, CDC will implement these prevention services for persons living with HIV. CDC also will require grantees to employ standardized procedures for prevention interventions and evaluation activities.

- **Further decrease perinatal HIV transmission.** CDC will promote recommendations for routine HIV testing of all pregnant women, and, as a safety net, for the routine screening of any infant whose mother was not screened. CDC will work with prevention partners, including the American College of Obstetricians and Gynecologists, the American Academy of Pediatrics, the American Academy of Family

Physicians, and the American College of Nurse-Midwives, to disseminate the recommendations and support their implementation. CDC also will develop guidance for using rapid tests during labor and delivery, or post partum if the mother was not screened prenatally, and provide training for health departments and providers in conducting prenatal testing. In 2003, CDC will expand its activities to monitor the integration of routine prenatal testing into medical practice.

Reporting of HIV infections to public health authorities is now required in 49 states. In 2002, CDC initiated a pilot system to monitor HIV incidence. To track the impact of the new initiative, beginning in 2003, CDC is expanding this surveillance system by implementing a national behavioral surveillance system. In addition, CDC will monitor the implementation of these new activities through several systems, including new performance indicators for state and local health departments and CBOs.

Stable HIV morbidity and mortality, increased numbers of syphilis and HIV cases, and growing concern about increasing HIV incidence in some communities require new strategies to control the spread of HIV in the United States. Through Advancing HIV Prevention: New Strategies for a Changing Epidemic, every HIV-infected person should have the opportunity to be tested and have access to state-of-the-art medical care and to the prevention services needed to prevent HIV transmission.

References

1. CDC. Primary and secondary syphilis among men who have sex with men—New York City, 2001. MMWR 2002;51:853–6.
2. Janssen RS, Holtgrave DR, Valdiserri RO, Shepherd M, Gayle HD, DeCock KM. The serostatus approach to fighting the HIV epidemic: prevention strategies for infected individuals. Am J Pub Health 2001;91:1019–24.
3. Fleming P, Byers RH, Sweeney PA, Daniels D, Karon JM, Janssen RS. HIV prevalence in the United States, 2000. [Abstract]. In: Program and abstracts of the 9th Conference on Retroviruses and Opportunistic Infections, Seattle, Washington, February 24–28, 2002. Alexandria, Virginia: Foundation for Retrovirology and Human Health.
4. CDC. HIV/AIDS Surveillance report, 2001;13(2).
5. MacKellar DA, Valleroy LA, Secura GM, Behel SK. Unrecognized HIV infection, risk behaviors, and mis-perceptions of risk among young men who have sex with men—6 United States cities, 1994–2000. [Abstract]. In: Final program and abstracts of the XIV International AIDS Conference, Barcelona, Spain, July 5–12, 2002.
6. Neal JJ, Fleming PL. Frequency and predictors of late HIV diagnosis in the United States, 1994 through 1999. In: Final program and abstracts of the 9th Conference on Retroviruses and Opportunistic Infections, Seattle, Washington, February 24–28, 2002. Alexandria, Virginia: Foundation for Retrovirology and Human Health.
7. CDC. Adoption of protective behaviors among persons with recent HIV infection and diagnosis—Alabama, New Jersey, and Tennessee, 1997–1998. MMWR 2000;49:512–5.
8. Institute of Medicine. No time to lose: getting more from HIV prevention. Washington, DC: National Academy Press, 2001.
9. CDC. Recommendations for HIV testing services for inpatients and outpatients in acute-care hospital settings. MMWR 1993;42(No. RR-2).
10. CDC. Revised guidelines for HIV counseling, testing, and referral. MMWR 2001;50(No. RR-19).
11. Golden MR. HIV partner notification: a neglected prevention intervention [editorial]. Sex Transm Dis 2002;29:472–5.

Update: Severe Acute Respiratory Syndrome — United States, 2003

CDC and the World Health Organization (WHO) are continuing to investigate the multicountry outbreak of severe acute respiratory syndrome (SARS). This report updates information on reported SARS cases among U.S. residents and summarizes information on patients with no recent travel outside the United States.

During November 1, 2002–April 16, 2003, a total of 3,293 SARS cases were reported to WHO from 22 countries, including the United States; 159 deaths (case-fatality proportion: 4.8%) have been reported (*1*). WHO-defined areas where local chains of transmission have been identified include regions of China (Beijing; Hong Kong Special Administrative Region; and Guangdong, Shanxi, and Taiwan provinces), Singapore, Vietnam (Hanoi), Canada (Toronto), United Kingdom (London), and the United States (*2*). Taiwan province, London, and the United States are considered by WHO to be areas with limited local transmission (i.e., no reported transmission other than close person-to-person contact with a known SARS patient).

In the United States, as of April 17, a total of 208 suspected SARS cases were reported to CDC from 34 states (Figure). Of these, 35 (17%) had illness consistent with the WHO case definition for probable SARS which requires the presence of pneumonia or acute respiratory distress syndrome (RDS) (*3*), and the remaining 173 (83%) had fever and milder respiratory symptoms (Table 1). Of the 35 probable patients, 33 (94%) had traveled to mainland China, Hong Kong, Singapore, or Hanoi; one (3%) was a health-care worker (HCW) who provided care to a SARS patient, and one (3%) was a household contact of a SARS patient. As previously reported, five of these 33 patients, all of whom were travelers, had laboratory evidence of recent infection with a novel coronavirus (*4*). Although no additional coronavirus infections have been documented among other U.S. suspected SARS cases, collection and testing of convalescent sera (i.e., sera obtained >21 days after illness onset) for coronavirus infection is ongoing.

rec•om•men•da•tion: *n*

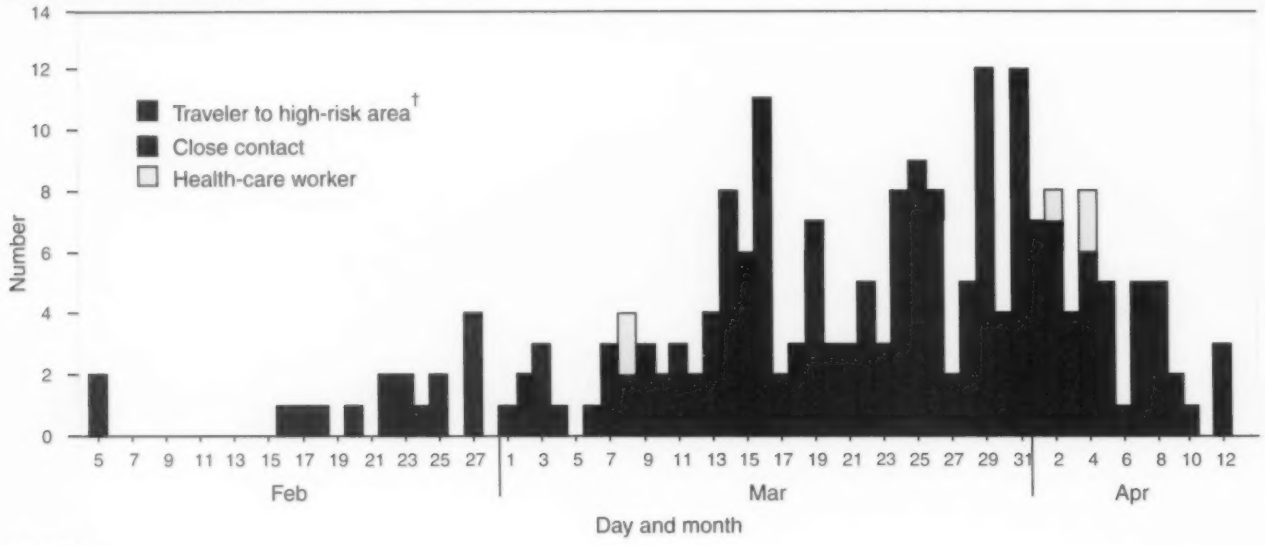
(rek-ə-mən-'dā-shən) 1 : something, such as a course of action, that is recommended; see also *MMWR*.

know what matters.

MMWR™

Recommendations and Reports

FIGURE. Number of reported suspected cases* of severe acute respiratory syndrome, by exposure category and date of illness onset — United States, 2003



*N = 208.
†Mainland China, Hong Kong, Singapore, or Hanoi.

SARS Patients with No History of Recent Travel Outside the United States

A total of 19 U.S. residents reported with SARS have no history of travel to mainland China, Hong Kong, Singapore, or Hanoi. All reported close contact with a SARS patient who had traveled recently to one or more of these areas. Five of these cases occurred among HCWs who were exposed to a suspected SARS patient and either did not use personal protective equipment or removed it while examining the patient; in only one instance was the SARS patient provided a surgical mask. Among the 19 close contacts, two had illness consistent with the WHO case definition for a probable case, four required hospitalization, and none is currently hospitalized. Ten have had acute specimens that tested negative for the novel coronavirus. One patient also has had a negative convalescent serum.

These 19 patients were close contacts of 16 index patients. Of the 16 index patients, one (6%) tested positive for coronavirus infection, three (19%) have had a negative serologic test on a convalescent specimen; results from 12 (75%) are pending. Two (11%) index patients had illness consistent with the WHO definition of a probable SARS case; the two instances of local transmission in the United States involving these patients are summarized (Table 2).

Local Transmission Pair 1. During February 23–March 9, a U.S. resident aged 40 years traveled to mainland China and Hanoi. On March 10, the traveler had fever, cough, and shortness of breath. A chest radiograph revealed pneumonia, and the patient was hospitalized during March 15–16. On March 16, his child aged 7 years had fever and cough. Although the child's chest radiograph did not show evidence of pneumonia, the child was hospitalized for observation and evaluation.

Local Transmission Pair 2. During March 1–6, a man aged 39 years traveled to Hong Kong with his wife and stayed in Hotel M, which has been epidemiologically linked to many of the initial SARS cases (*4*). On March 13, he had fever and respiratory symptoms and was subsequently hospitalized with pneumonia. He tested positive for the novel coronavirus. On March 19, a total of 13 days after return from Hong Kong, his wife became ill and was subsequently hospitalized with radiographic evidence of pneumonia.

Reported by: *State and local health departments. SARS Investigative Team, CDC.*

Editorial Note: The primary focus of SARS surveillance activities in the United States is early identification and isolation of patients who have suspected SARS. Many suspected SARS patients in the United States have had relatively mild

TABLE 1. Number* and percentage of reported suspected severe acute respiratory syndrome (SARS) cases, by selected characteristics — United States, 2003

Characteristic	Probable† cases (n = 35) No.	(%)	Other suspected cases§ (n = 173) No.	(%)
Age (yrs)				
0–4	3	(9)	21	(11)
5–9	0	(0)	9	(5)
10–17	1	(3)	2	(1)
18–64	25	(71)	119	(70)
≥65	4	(11)	17	(10)
Unknown	2	(6)	5	(3)
Sex				
Female	16	(46)	84	(49)
Male	18	(51)	88	(50)
Unknown	1	(3)	1	(1)
Race				
White	18	(49)	95	(55)
Black	0	(0)	3	(2)
Asian	14	(42)	58	(33)
Other	0	(0)	1	(1)
Unknown	3	(9)	16	(9)
Exposure				
Travel¶	33	(94)	156	(90)
Close contact	1	(3)	13	(8)
Health-care worker	1	(3)	4	(2)
Hospitalized >24 hrs**				
Yes	23	(65)	38	(22)
No	11	(32)	129	(75)
Unknown	1	(3)	6	(3)
Chest radiograph findings				
Pneumonia or RDS	35	(100)	0	(0)
No radiograph or unknown results	0	(0)	173	(100)
Required mechanical ventilation				
Yes	1	(3)	0	(0)
No	34	(97)	170	(98)
Unknown	0	(0)	3	(2)

* N = 208.
† Subset of total suspected SARS cases, with pneumonia on chest radiograph or respiratory distress syndrome (RDS), having illness consistent with the World Health Organization (WHO) probable SARS case definition.
§ Subset of total suspected SARS cases, excluding those that are consistent with the WHO probable SARS case definition.
¶ To mainland China, Hong Kong, Hanoi, or Singapore.
** As of April 16, no deaths of SARS patients have been reported in the United States.

illness and have not required hospitalization or chest radiographs. The majority of these reported patients are not likely to have the novel coronavirus infection, as respiratory illness is common in travelers (*5,6*). A small number of persons reported with SARS in the United States had more severe illness that was consistent with the WHO case definition of probable SARS. Cases reported to WHO from other countries are probable SARS cases, whereas the United States has reported all of its suspected cases (*7*).

In the United States, local transmission of suspected SARS has been limited to HCWs and close contacts of suspected SARS patients who were travelers. Identifying persons who might be at risk for SARS on arrival to a medical facility or office is difficult and requires changes in the way medical evaluations are conducted. Revised interim guidelines for triage recommend that all patients in ambulatory-care settings be screened promptly for fever, respiratory symptoms, recent travel, and close contact with a suspected SARS patient (*8*). CDC has provided guidance to state and local health departments for conducting surveillance of HCWs following exposure to a SARS patient.

To prevent secondary transmission, close contacts of SARS patients should be vigilant for fever or respiratory symptoms. If such symptoms develop, exposed persons should avoid contact with others, seek immediate medical attention, and practice infection-control precautions recommended for SARS patients (*9*). Household members and other close contacts of SARS patients should be actively monitored by the local health department for illness.

CDC continues to develop and refine laboratory testing for the novel coronavirus that has been implicated as the cause of SARS and has recently published the nucleic acid sequence of the genome (*10*). Incorporating laboratory evidence of coronavirus infection into the case definition will be important to characterize the clinical manifestations of coronavirus infection and understand the relation between infection with this novel coronavirus and SARS.

TABLE 2. Cases of severe acute respiratory syndrome involving contacts exposed to index patients with illness consistent with the World Health Organization probable case definition, by selected characteristics — United States, 2003

Patients	Exposure	Age (yrs)	Date of onset	Pneumonia/RDS*	Hospitalized	Coronavirus test result†
Pair 1						
Index	China and Vietnam	40	Mar 10	Present	Yes	Negative
Contact	Household	7	Mar 16	Absent	Yes	Negative
Pair 2						
Index	Hong Kong	39	Mar 13	Present	Yes	Positive
Contact	Hong Kong and household	37	Mar 19	Present	Yes	Negative

* Respiratory distress syndrome.
† Acute phase specimens; collection and testing of convalescent specimens pending for patients with negative results.

MMWR now publishes important health information, like reports related to terrorism and other health emergencies, as often as required to protect the public health. MMWR Dispatch provides the latest and most accurate information regarding public health investigations, surveillance, prevention and treatment guidelines, and other clinical information. Visit cdc.gov/mmwr, and sign up to receive MMWR Dispatch by e-mail. In addition to MMWR Dispatch, you'll also receive MMWR Weekly, MMWR Recommendations and Reports, and MMWR Surveillance Summaries. As always, MMWR is also available in print. Anytime MMWR Dispatch is published online, it also appears in the next printed MMWR issue. MMWR Dispatch. Another way MMWR helps you stay current on important public health, clinical, and scientific topics.

know what matters.

References

1. World Health Organization. Cumulative number of reported cases of severe acute respiratory syndrome (SARS). Available at http://www.who.int/csr/sarscountry/2003_04_16/en.
2. World Health Organization. Affected areas—severe acute respiratory syndrome (SARS). Available at http://www.who.int/csr/sarsareas/2003_04_16/en/.
3. World Health Organization. Case definitions for surveillance of severe acute respiratory syndrome (SARS). Available at http://www.who.int/csr/sars/casedefinition/en.
4. CDC. Severe Acute Respiratory Syndrome (SARS) and Coronavirus Testing—United States, 2003. MMWR 2003;52: 297–302
5. O'Brien D, Tobin S, Brown GV, Torresi J. Fever in returned travelers: review of hospital admissions for a 3-year period. Clin Infect Dis 2001;33:603–9.
6. Leder K, Sundararajan V, Weld L, et al. Respiratory tract infections in travelers: a review of the GeoSentinel Surveillance Network. Clin Infect Dis 2003;36:399–406.
7. CDC. Updated interim U.S. case definition of severe acute respiratory syndrome (SARS). Available at http://www.cdc.gov/ncidod/sars/casedefinition.htm.
8. CDC. Updated interim domestic guidelines for triage and disposition of patients who may have severe acute respiratory syndrome (SARS). Available at http://www.cdc.gov/ncidod/sars/triage_interim_guidance.htm.
9. CDC. Interim guidance on infection control precautions for patients with suspected severe acute respiratory syndrome (SARS) and close contacts in households. Available at http://www.cdc.gov/ncidod/sars/ic-closecontacts.htm.
10. CDC. SARS coronavirus sequencing. Available at http://www.cdc.gov/ncidod/sars/sequence.htm.

Pneumoconiosis Prevalence Among Working Coal Miners Examined in Federal Chest Radiograph Surveillance Programs — United States, 1996–2002

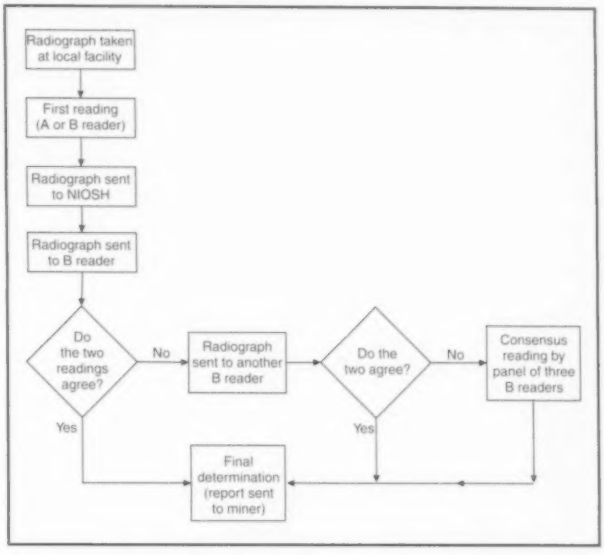
Coal workers' pneumoconiosis (CWP) is a chronic lung disease caused by inhalation of coal mine dust. To characterize the prevalence of CWP, the National Institute for Occupational Safety and Health (NIOSH) analyzed recent radiographic information from the U.S. National Coal Workers' X-ray Surveillance Program (CWXSP). Established under the Federal Coal Mine Health and Safety Act of 1969 (*1*), CWXSP is administered by NIOSH under federal regulations (*2*). NIOSH is responsible for approving coal miner examination plans, submitted approximately every 5 years by companies that operate underground coal mines. This report summarizes the results of the analysis, which indicate that the overall prevalence of CWP among participating miners continues to decline; however, new cases are occurring among miners who have worked exclusively under current dust exposure limits. An evaluation of the mining conditions that have resulted in these cases is underway.

Federal regulations specify that companies offer underground coal miners a chest radiograph at first employment and every 5 years thereafter while employed. Periodic radiographs that use a specified radiographic technique are offered during a 6-month examination period at NIOSH-approved health facilities. During October 1, 1999–September 30, 2002, NIOSH collaborated with the Mine Safety and Health Administration (MSHA) to accept films from MSHA's new Miners' Choice Program (MCP) for classification by using CWXSP procedures. Operating independently of coal mine operators, MCP ran concurrently with CWXSP and encouraged miners to undergo radiographic examination. MCP participants were miners from 586 surface coal mines, which are not required or encouraged to participate in CWXSP, and from 444 underground coal mines.

Coal miner chest radiographs taken under these programs are classified by using the 1980 International Labour Office (ILO) International Classification of Radiographs of Pneumoconioses (*3*). To ensure proficiency in classification, NIOSH has established a two-tier system for designation of radiograph readers. "A" readers have completed a training course or have otherwise demonstrated competence in the use of the ILO Classification, and "B" readers have successfully completed a certification examination and must be recertified every 4 years (*4*). A final determination of the classification of each radiograph is made by using a standardized process and requires agreement between at least two readers, only one of whom may be an "A" reader, about both the presence and severity of apparent dust-related abnormalities (Figure 1) (*2*). An identification of CWP requires reader agreement that small pneumoconiotic opacities are present at an ILO profusion category of ≥1/0. An identification of progressive massive fibrosis (PMF), an advanced form of CWP, requires reader agreement on the presence of large pneumoconiotic opacities.

During October 1, 1995–September 30, 2002, CWXSP and MCP received 35,983 readable chest films for 31,179 miners at 1,439 mines in 23 states. The crude prevalence of CWP among all examinees was 2.8% (862 cases), and the corresponding prevalence of PMF was 0.2% (62 cases). CWP prevalences among examinees who were noncontract employees at surface mines, noncontract employees at underground mines, and contract* miners were 1.9%, 3.2%, and 3.0%, respectively. Among the 16 states with underground noncontract miner examinees, CWP prevalences ranged from zero to 9.6%, and corresponding PMF prevalences ranged from zero to 0.6% (Table 1). Examinees from larger mines (≥50 employees) had a lower prevalence of pneumoconiosis than those from smaller mines (2.0% versus 5.6% for CWP [p<0.0001], and 0.1% versus 0.5% for PMF [p<0.0001]). For all age groups, the prevalences of CWP and PMF increased with age (Table 2).

FIGURE 1. Final determination process for chest radiograph classifications — U.S. National Coal Workers' X-Ray Surveillance Program and Miners' Choice Program


Radiograph taken at local facility
First reading (A or B reader)
Radiograph sent to NIOSH
Radiograph sent to B reader
Do the two readings agree?
No
Radiograph sent to another B reader
Do the two agree?
No
Consensus reading by panel of three B readers
Yes
Yes
Final determination (report sent to miner)

Information about tenure in coal mining was available for 28,253 miners. For underground miners of all tenures (n = 18,388), CWP and PMF prevalences increased with underground mining tenure (Table 2). Corresponding tenure-specific prevalences among surface miners (n = 9,793) similarly increased with surface mining tenure.

Participation rates were estimated by using the number of coal miners for whom radiographs were taken and the average number of coal miners employed during the same period, based on quarterly employment figures obtained from MSHA. Estimated participation rates were 25.5% for noncontract miners and 0.1% for contract miners and varied substantially by state (Table 1). Participation was higher among miners who worked at large mines than among miners at small mines (37.6% versus 11.7%; p<0.0001), and among miners at underground mines than among miners at surface mines (31.0% versus 18.9%; p<0.0001). Estimated participation rates for miners at mines at which at least one miner was examined were 34.4% for noncontract underground miners and 31.9% for surface miners.

* Persons who perform mining-related tasks, either underground or at the surface, for other business entities that coal mine owners or operators contract with for services.

TABLE 1. Prevalence of coal workers' pneumoconiosis (CWP) and progressive massive fibrosis (PMF) among examined noncontract miners*, estimated number of employees, and participation rates, by state — U.S. National Coal Workers' X-ray Surveillance Program and Miners' Choice Program, fiscal years 1996–2002

State	Underground miners					Surface miners					Average employment and estimated participation†			
	No. miners examined	CWP		PMF		No. miners examined	CWP		PMF		Underground miners		Surface miners	
		No.	(%)	No.	(%)		No.	(%)	No.	(%)	No.	(%)	No.	(%)
Alabama	2,308	25	(1.1)	3	(0.1)	524	5	(1.0)	1	(0.2)	3,904	(59.1)	2,200	(23.8)
Arizona	0	—	—	—	—	520	5	(1.0)	0	(0)	0	—	737	(70.6)
Arkansas	9	0	(0)	0	(0)	0	—	—	—	—	9	(100.0)	13	(0)
Colorado	1,655	24	(1.5)	3	(0.2)	180	3	(1.7)	0	(0)	1,655	(100.0)	712	(25.3)
Illinois	2,863	31	(1.1)	1	(0.0)	175	1	(0.6)	0	(0)	4,300	(66.6)	1,212	(14.4)
Indiana	816	5	(0.6)	0	(0)	397	2	(0.5)	0	(0)	816	(100.0)	2,836	(14.0)
Kentucky	3,073	106	(3.5)	9	(0.3)	1,253	34	(2.7)	3	(0.2)	19,220	(16.0)	13,910	(9.0)
Louisiana	0	—	—	—	—	112	0	(0)	0	(0)	0	—	168	(66.7)
Maryland	249	24	(9.6)	0	(0)	52	2	(3.9)	0	(0)	273	(91.2)	247	(21.1)
Montana	0	—	—	—	—	183	0	(0)	0	(0)	13	(0)	902	(20.3)
New Mexico	123	1	(0.8)	0	(0)	919	7	(0.8)	0	(0)	123	(100.0)	1,654	(55.6)
North Dakota	0	—	—	—	—	278	2	(0.7)	0	(0)	0	—	966	(28.8)
Ohio	530	9	(1.7)	0	(0)	406	10	(2.5)	0	(0)	1,952	(27.2)	2,241	(18.1)
Oklahoma	21	0	(0)	0	(0)	0	—	—	—	—	43	(48.8)	259	(0)
Pennsylvania	2,468	44	(1.8)	3	(0.1)	778	22	(2.8)	3	(0.4)	6,204	(39.8)	5,468	(14.2)
Tennessee	102	5	(4.9)	0	(0)	52	2	(3.9)	0	(0)	681	(15.0)	712	(7.3)
Texas	0	—	—	—	—	1,292	11	(0.9)	0	(0)	0	—	2,598	(49.7)
Utah	1,586	8	(0.5)	1	(0.1)	48	1	(2.1)	0	(0)	2,184	(72.6)	96	(50.0)
Virginia	1,749	150	(8.6)	11	(0.6)	743	28	(3.8)	1	(0.1)	6,771	(25.8)	3,718	(20.0)
Washington	0	—	—			81	0	0	0	(0)	0	—	580	(14.0)
West Virginia	3,069	232	(7.6)	17	(0.6)	1,221	58	(4.8)	5	(0.4)	18,289	(16.8)	8,939	(13.7)
Wyoming	26	0	(0)	0	(0)	1,252	3	(0.2)	0	(0)	95	(27.4)	4,771	(26.2)
Others§	0	—	—	—	—	0	—	—	—	—	8	—	550	(0)
Total	**20,647**	**664**	**(3.2)**	**48**	**(0.2)**	**10,466**	**196**	**(1.9)**	**13**	**(0.1)**	**66,540**	**(31.0)**	**55,489**	**(18.9)**

* Among 66 examined contract miners from nine states (Alabama, Indiana, Kentucky, Michigan, Pennsylvania, Tennessee, Utah, Virginia, and West Virginia), two were determined to have CWP, and one was determined to have PMF.
† Participation by contract miners was low; of an estimated 47,662 contract miners working at surface or underground coal mines, only 66 (0.1%) were examined in the federal programs.
§ Alaska, California, Kansas, Mississippi, and Missouri.

Reported by: *MRL Pon, MPH, RA Roper, MS, Div of Health, Coal Mine Safety and Health, Mine Safety and Health Administration, US Dept of Labor. EL Petsonk, MD, ML Wang, MD, RM Castellan, MD, MD Attfield, PhD, GR Wagner, MD, Div of Respiratory Disease Studies, National Institute for Occupational Safety and Health, CDC.*

Editorial Note: To reduce the occurrence of occupational respiratory disability among coal miners, the Coal Mine Health and Safety Act of 1969 established limits on permissible dust exposures in underground coal mines and a radiographic screening program for underground coal miners. As mandated by the act, underground miners determined to have radiographic evidence of CWP are offered frequent exposure monitoring to ensure that their exposure to respirable dust is <1.0 mg/m^3, and wage rates are retained if a job transfer is necessary to limit dust exposure. Miners with PMF are qualified to receive Federal Black Lung benefits.

During 1970–1995, CWP prevalence declined markedly (*4–6*), highlighting an intended outcome of dust control in underground coal mines. The findings in this report indicate a continuing decline in CWP prevalence for underground miners with tenures of >20 years but no clear trend for those with tenures of ≤20 years (Figure 2). CWP continues to occur among working coal miners, even among those first employed after the current federal exposure limit became effective. The results raise concern about possible excessive exposures experienced by miners in several states, at smaller mines, and by some surface and contract miners.

Both CWXSP and MCP address data quality and control biases by specifying standardized radiographic technique, by using only approved facilities and radiographic equipment, and by employing a standardized approach for assigning final determinations of radiograph classifications based on independent readings of each radiograph by multiple certified readers.

The findings in this report are subject to at least four limitations. First, the programs are restricted to employed miners and are voluntary. Second, participation rates were low, especially among contract miners and miners at small mines. Third,

TABLE 2. Prevalence of coal workers' pneumoconiosis (CWP) and progressive massive fibrosis (PMF) among examined coal miners, by age group and tenure group — United States, fiscal years 1996–2002

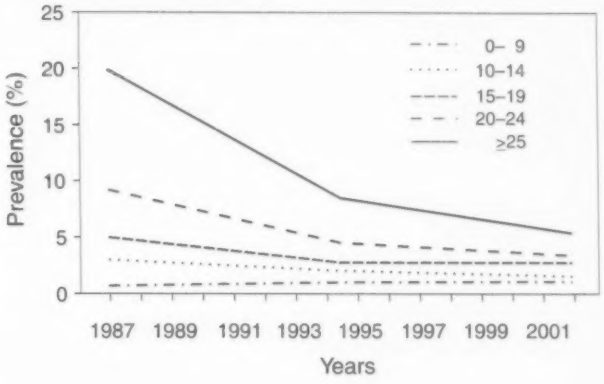
Age/Tenure group (yrs)	No. miners examined	CWP No.	CWP (%)	PMF No.	PMF (%)
Age group					
<30	3,440	8	(0.2)	0	(0)
30–39	4,955	85	(1.7)	4	(0.1)
40–49	12,975	392	(3.0)	24	(0.2)
50–59	8,632	317	(3.7)	25	(0.3)
≥60	1,177	60	(5.1)	9	(0.8)
Total	**31,179**	**862**	**(2.8)**	**62**	**(0.2)**
Underground coal mining tenure*					
0– 9	3,268	36	(1.1)	0	(0)
10–14	1,403	22	(1.6)	0	(0)
15–19	1,985	56	(2.8)	4	(0.2)
20–24	4,954	166	(3.4)	13	(0.3)
≥25	6,778	367	(5.4)	30	(0.4)
Total	**18,388**	**647**	**(3.5)**	**47**	**(0.3)**
Surface coal mining tenure*					
0– 9	1,600	9	(0.6)	0	(0)
10–14	1,006	11	(1.1)	0	(0)
15–19	1,193	15	(1.3)	0	(0)
20–24	2,612	38	(1.5)	1	(0.0)
≥25	3,403	114	(3.4)	10	(0.3)
Total	**9,814**	**187**	**(1.9)**	**11**	**(0.1)**

* For examinees with job tenure information available.

work history data (e.g., tenure and date of first employment in mining) were not obtained consistently for all examinees. Finally, the effect of resulting potential participation biases on the generalizability of the aggregate results beyond the examinees is not clear, and the prevalences of CWP and PMF among all working or retired U.S. coal miners cannot be determined from available data. However, the general validity of these results is supported by the consistent relations observed over time between CWP prevalence and year of first employment, age, and tenure.

Estimated participation rates were based on approximate denominators derived from the required quarterly reporting to MSHA of mine employment by coal operators. Several factors probably reduced participation rates: 1) MCP was not available at all surface mines; 2) at some underground mines, miners were not offered radiographs as required by CWXSP; and 3) not all of the underground miners included in denominators based on MSHA employment reports were employed during their mine's 6-month examination period. MCP was initiated in response to recommendations to enhance medical screening and health surveillance of coal miners (*7*) and has shown some early success in increasing participation of coal miners. The experience with this program

FIGURE 2. Trends in coal workers' pneumoconiosis prevalence by tenure among examinees employed at underground coal mines — U.S. National Coal Workers' X-Ray Surveillance Program, 1987–2002



is being reviewed to identify approaches that might result in sustained improvements in participation.

Radiographic screening and surveillance programs protect the health of coal miners by detecting CWP and PMF in miners, allowing for preventive intervention focused on affected miners. Through aggregate analyses of screening results, these programs also can identify apparent high-risk subgroups that warrant further evaluation and appropriate intervention. However, primary prevention through general control of occupational exposure to coal mine dust remains essential for preventing CWP. To reduce the risk for lung disease among coal miners, MSHA has initiated rule-making efforts to ensure adherence to the current 2 mg/m^3 or applicable respirable dust standard for underground coal mines during every work shift (*8*). NIOSH has recommended that MSHA lower the permissible exposure limit for respirable coal mine dust from 2 mg/m^3 to 1 mg/m^3 (*9,10*).

References

1. Federal Coal Mine Health and Safety Act. Public Law no. 91–173 (1969).
2. U.S. Code of Federal Regulations. Title 42. Chapter I. Part 37. Available at http://www.access.gpo.gov/nara/cfr/waisidx_01/42cfr37_01.html.
3. International Labour Office. Guidelines for the use of ILO International Classification of Radiographs of Pneumoconioses. Geneva, Switzerland: International Labour Office, 1980.
4. Wagner GR, Attfield MD, Kennedy RD, Parker JE. The NIOSH B reader certification program—an updated report. J Occup Med 1992;34:879–84.
5. Attfield MD, Althouse RB. Surveillance data on US coal miners' pneumoconiosis, 1970 to 1986. Am J Public Health 1992;82:971–7.
6. Attfield MD. Prevalence and incidence of coalworkers' pneumoconiosis in U.S. underground miners. In: Proceedings of the 9th International Symposium of Epidemiology in Occupational Health. Cincinnati, Ohio: U.S. Department of Health and Human Services, 1994; DHHS publication no. (NIOSH) 94–112.

7. Wagner GR, Attfield MD, Merchant JA. Coal workers' lung diseases. In: Wallace RB, ed. Maxcy-Rosenau-Last Public Health & Preventive Medicine, 14th ed. Stamford, Connecticut: Appleton & Lange, 1998.
8. Mine Safety and Health Administration. Proposed rules: coal mine safety and health. Federal Register, Vol. 68, No.44, March 6, 2003. Available at http://www.msha.gov/newsinfo.htm.
9. CDC. Criteria for a recommended standard: occupational exposure to coal mine dust. Washington, DC: U.S. Department of Health and Human Services, Public Health Service, CDC, 1995; DHHS publication no. (NIOSH) 95–106.
10. U.S. Department of Labor. Report of the Secretary of Labor's Advisory Committee on the Elimination of Pneumoconiosis among Coal Mine Workers. Washington, DC: U.S. Department of Labor, 1996.

Preliminary FoodNet Data on the Incidence of Foodborne Illnesses — Selected Sites, United States, 2002

In the United States, an estimated 76 million persons contract foodborne illnesses each year (*1*). CDC's Emerging Infections Program Foodborne Diseases Active Surveillance Network (FoodNet) collects data on 10 foodborne diseases in nine U.S. sites. FoodNet follows trends in foodborne infections by using laboratory-based surveillance for culture-confirmed illness caused by several enteric pathogens commonly transmitted through food (*2*). This report describes preliminary surveillance data for 2002 and compares them with 1996–2001 data. The data indicate a sustained decrease in major bacterial foodborne illnesses such as *Campylobacter* and *Listeria*, indicating progress toward meeting the national health objectives of reducing the incidence of foodborne infections by 2010 (objectives 10-1a to 10-1d) (*3*). However, the data do not indicate a sustained decline in other major foodborne infections such as *Escherichia coli* O157 and *Salmonella*, indicating that increased efforts are needed to reduce further the incidence of foodborne illnesses.

In 1996, FoodNet began active surveillance for laboratory-diagnosed cases of infection with *Campylobacter*, Shiga toxin-producing *E. coli* (STEC) O157, *Listeria monocytogenes*, *Salmonella*, *Shigella*, *Vibrio*, and *Yersinia enterocolitica*. In 1997, FoodNet added surveillance for laboratory-diagnosed cases of *Cryptosporidium parvum*, *Cyclospora cayetanensis*, and cases of hemolytic uremic syndrome (HUS). In 2000, FoodNet began to capture information on non-O157 STEC. From 1996 to 2002, the FoodNet surveillance population increased from five sites and a population of 14.2 million to nine sites and 37.4 million persons (13% of the U.S. population).

To identify cases, FoodNet personnel contact all clinical laboratories in their surveillance area either weekly or monthly depending on the size of the clinical laboratory. Cases represent the first isolation of a pathogen from a person by a clinical laboratory; the majority of specimens are obtained for diagnostic purposes from ill persons. HUS surveillance is conducted by contacting all FoodNet-identified pediatric nephrologists at least monthly. In this report, analyses of HUS incidence were performed only on children aged <5 years; 94% of these children had a documented history of diarrhea during the 3 weeks preceding diagnosis of HUS. Preliminary incidence for 2002 was calculated by using the number of cases of diagnosed infections or HUS that FoodNet had identified as the numerator and 2002 population estimates as the denominator (*4*).

2002 Surveillance

During 2002, a total of 16,580 laboratory-diagnosed cases of 10 infections under surveillance were identified: 6,028 of *Salmonella* infection, 5,006 of *Campylobacter*, 3,875 of *Shigella*, 647 of STEC O157 (26 of non-O157 STEC), 541 of *Cryptosporidium*, 166 of *Yersinia*, 103 of *Vibrio*, 101 of *Listeria*, 44 of HUS, and 43 of *Cyclospora*. Among the 5,481 (91%) *Salmonella* isolates serotyped, the three most common serotypes accounted for 49% of the infections: 1,051 (19%) were serotype Typhimurium, 842 (15%) were Enteritidis, and 791 (14%) were Newport. The most common non-O157 STEC serotypes isolated were O26 and O111. Substantial variations in incidence of specific infections, defined as laboratory isolations per 100,000 persons, were reported among the sites (Table).

1996–2002 Comparison

A main effects log-linear Poisson regression model (*5*) was used to estimate the effect of time on the incidence of the various pathogens, treating calendar year as a categorical variable, with 1996 as the reference year. This model assumed that disease incidence in sites added to surveillance after 1996 changed over time in a way similar to the change that occurred in the original five sites. The relative change in incidence from 1996 to 2002 was estimated, and confidence intervals (CIs) for that change were calculated.

In 2002, the bacterial pathogens with the highest incidence were *Salmonella*, *Campylobacter*, and *Shigella* (Table). From 1996 to 2002, the incidence of infection with several pathogens decreased. For *Campylobacter*, *Listeria*, and *Yersinia*, this decrease was observed consistently over several years (Figure 1). The estimated incidence of *Campylobacter* decreased 24% (95% CI = 32%–16% decrease), *Listeria* decreased 38% (95% CI = 52%–19% decrease), and *Yersinia* decreased 43% (95%

TABLE. Incidence* of cases of infection with nine pathogens and of one syndrome under surveillance in the Foodborne Diseases Active Surveillance Network, by site, compared with national health objectives for 2010 — United States, 2002

Syndrome	California	Colorado	Connecticut	Georgia	Maryland	Minnesota	New York	Oregon	Tennessee	Overall	Objective
Campylobacter	31. 67	13.99	15.79	7.58	6.72	18.95	12.97	16.01	6.37	**13.37**	12.30
Escherichia coli O157	0.99	2.12	1.37	0.67	0.48	3.62	1.69	5.13	0.70	**1.73**	1.00
Listeria	0.37	0.12	0.47	0.18	0.43	0.10	0.45	0.26	0.11	**0.27**	0.25
Salmonella	15.85	13.46	13.28	21.43	17.13	11.87	16.22	9.53	19.61	**16.10**	6.80
Shigella	11.45	5.53	3.04	19.06	21.53	4.46	1.60	2.71	5.07	**10.34**	NA†
Vibrio	0.37	0.12	0.32	0.32	0.35	0.10	0.12	0.43	0.25	**0.27**	NA
Yersinia	0.50	0.12	0.47	0.51	0.26	0.38	0.63	0.49	0.60	**0.44**	NA
Cryptosporidium	0.99	0.88	0.55	1.43	0.52	4.10	1.75	1.15	0.46	**1.42**	NA
Cyclospora	0.05	NR§	0.20	0.27	0.05	NR	0.33	NR	0.04	**0.11**	NA
HUS¶	1.01	2.62	1.79	0.84	NR	2.42	0.49	8.96	NR	**1.78**	NA
Population in surveillance (millions)**	3.20	2.46	3.43	8.38	5.38	4.97	3.32	3.47	2.84	—	—

* Per 100,000 persons.
† Not applicable.
§ None reported.
¶ Hemolytic uremic syndrome. Incidence per 100,000 children aged <5 years.
** Population for some sites is entire state, for other sites, selected counties. For some sites, the catchment area for *Cryptosporidium* and *Cyclospora* is larger than for bacterial pathogens.

FIGURE 1. Relative rates compared with 1996 of laboratory-diagnosed cases of *Campylobacter*, *Listeria*, and *Yersinia*, by year — Foodborne Diseases Active Surveillance Network, United States, 1996–2002

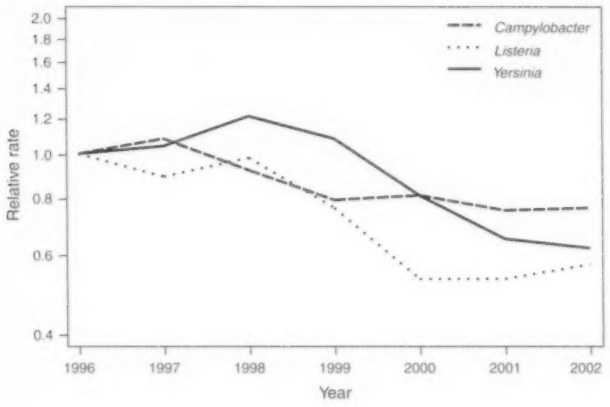
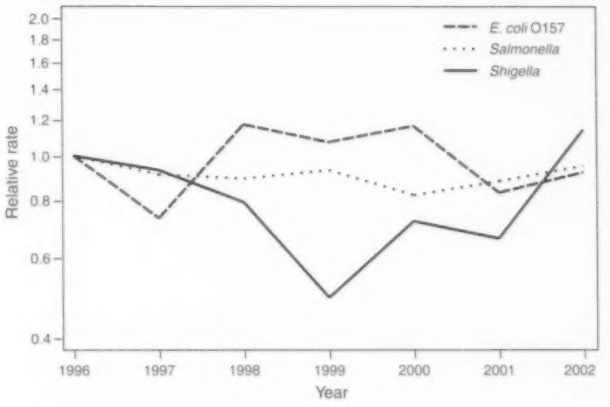


FIGURE 2. Relative rates compared with 1996 of laboratory-diagnosed cases of *Escherichia coli* O157, *Salmonella*, and *Shigella*, by year — Foodborne Diseases Active Surveillance Network, United States, 1996–2002



CI = 55%–27% decrease). From 1996 to 2002, the estimated incidence of *Salmonella* did not change significantly (Figure 2). However, during this period, the estimated incidence of *S.* Typhimurium decreased 31% (95% CI = 41%–18% decrease); this decrease was observed consistently over several years. The estimated incidence of *S.* Enteritidis did not change significantly (95% CI = 36% decrease–35% increase); a substantial decline in incidence before 1999 has been largely reversed by an increase in incidence. The estimated incidence of *S.* Newport increased 87% from 1996 to 2002 (95% CI = 15% to 203% increase), with the majority of the increase occurring since 2001. The incidence of *E. coli* O157 showed substantial variation by year and site. The estimated incidence in 2002 was 8% lower than 1996 (95% CI = 33% decrease–26% increase). Similar to *E. coli* O157, which is a major cause of HUS, the incidence of HUS among children aged <5 years has not changed significantly. The incidence of *Shigella* declined from 1996 to 1999 and has since increased; the estimated incidence in 2002 was 14% higher than in 1996 (95% CI = 34% decrease–99% increase) and varied by site each year. From 1996 to 2002, the estimated incidence of *Vibrio* infections increased 126% (95% CI = 29%–298% increase).

Surveillance for *Cryptosporidium* and *Cyclospora* began in 1997. From 1997 to 2002, the estimated incidence of *Cryptosporidium* increased 8% (95% CI = 35% decrease–81% increase). Although the incidence of *Cyclospora* has decreased since 1997, the Poisson regression model could not be applied because of the rarity of cases.

Reported by: *D Vugia, MD, California Dept of Health Svcs. J Hadler, MD, State Epidemiologist, Connecticut State Dept of Public Health. S Chaves, MD, Div of Public Health, Georgia Dept of Human Resources. D Blythe, MD, Maryland Dept of Health and Mental Hygiene. K Smith, DVM, Minnesota Dept of Health. D Morse, MD, New York State Dept of Health. P Cieslak, MD, Oregon Dept of Human Svcs. T Jones, MD, Tennessee Dept of Health. A Cronquist, MPH, Colorado Dept of Public Health and Environment. D Goldman, MD, Office of Public Health and Science, Food Safety and Inspection Svc, US Dept of Agriculture. J Guzewich, MPH, Center for Food Safety and Applied Nutrition, Food and Drug Administration. F Angulo, DVM, P Griffin, MD, R Tauxe, MD, Div of Bacterial and Mycotic Diseases, National Center for Infectious Diseases, CDC.*

Editorial Note: From 1996 to 2002, the incidence of *Campylobacter*, *Listeria*, and *Yersinia* has shown substantial declines. *Campylobacter* and *Listeria* incidences are approaching their respective national health objectives, indicating important progress in food safety. For infections caused by the three most common *Salmonella* serotypes, a sustained decline in incidence has occurred only for *S.* Typhimurium.

From 1996 to 2002, the incidence did not decline for *Salmonella*, *Shigella*, *Vibrio*, *Cryptosporidium*, *E. coli* O157, and HUS. Although the incidence of *Salmonella* declined initially, it has increased since 2000. *Salmonella* infections are caused by many different *Salmonella* serotypes with different animal reservoirs; therefore, changes in overall incidence of *Salmonella* are influenced strongly by the most common serotypes and their reservoirs. For example, the incidence of *S.* Enteritidis infections declined during the late 1990s but has since increased, similar to the incidence of *Salmonella* infections caused by all serotypes combined. Similarly, the largest increase in incidence of *Vibrio* infections occurred from 1996 to 1998, and this increase was associated with the emergence of a new pandemic strain of *Vibrio parahaemolyticus* (*6*). However, from 2000 to 2002, other *Vibrio* species have contributed substantially to the overall increase in *Vibrio* infections. Targeted efforts to reduce the rate of foodborne illnesses could include steps to reduce the prevalence of pathogens in their respective important animal reservoirs and the foods derived from them: cattle and ground beef (*E. coli* O157), egg-laying chickens (*S.* Enteritidis), and seafood, particularly oysters (*Vibrio*). Implementation of nationwide, mandatory, on-farm preventive controls would reduce the risk for human illness from *S.* Enteritidis-contaminated eggs; such controls have been effective in reducing *S.* Enteritidis contamination of eggs where implemented (*7*).

Some year-to-year variation in incidence can be attributed to outbreaks. For example, in 2002, both Georgia and Maryland experienced large community outbreaks of *Shigella sonnei* infections. Oregon experienced a large outbreak of *E. coli* O157 infections, many of which were complicated by HUS, associated with a county fair. A large outbreak of multidrug-resistant *S.* Newport infections from ground beef in 2002 might be related to emergence of this strain in dairy cattle (*8*). In 2002, a large multistate outbreak of infections caused by pansusceptible *S.* Newport was traced to contaminated tomatoes (*9*).

The changes in the incidence of these infections occurred in the context of several control measures, including implementation by the U.S. Department of Agriculture's Food Safety and Inspection Service (FSIS) of the Pathogen Reduction/Hazard Analysis and Critical Control Point (HACCP) systems regulations in meat and poultry slaughter and processing plants beginning in 1997. The decline in the rate of *S.* Typhimurium infections in humans coincided with a decline in the prevalence of *Salmonella* isolated from FSIS-regulated products to levels below baseline levels before HACCP was implemented (*10*). The Food and Drug Administration has introduced additional interventions to prevent foodborne diseases. These interventions include increased attention to fresh produce safety through better agricultural practices, regulations requiring the refrigeration and safety labeling of shell eggs, implementation of HACCP in the seafood and juice industries, food safety education, increased regulation of imported food, and industry efforts, including new intervention technologies, to reduce food contamination.

The findings in this report are subject to at least three limitations. First, FoodNet data are limited to diagnosed illnesses; however, the majority of foodborne illnesses are neither laboratory-diagnosed nor reported to state health departments. Second, some illnesses are acquired through nonfoodborne routes (e.g., contaminated water, person-to-person contact, and direct animal exposure); reported rates do not represent foodborne sources exclusively. Finally, although FoodNet data provide the most comprehensive information available for these infections, the findings might not be generalizable to the entire U.S. population.

The 2002 FoodNet final report will include incidence figures and other information, such as illness severity, and will be available in late 2003 at http://www.cdc.gov/foodnet.

Acknowledgment

This report is based on data contributed by members of the FoodNet Working Group.

References

1. Mead PS, Slutsker L, Dietz V, et al. Food-related illness and death in the United States. Emerg Infect Dis 1999;5:607–25.
2. CDC. Preliminary FoodNet data on the incidence of foodborne illness—selected sites, United States, 2001. MMWR 2002;51:325–9.
3. U.S. Department of Health and Human Services. Healthy people 2010 (conference ed., 2 vols). Washington, DC: U.S. Department of Health and Human Services, 2000.
4. Bureau of the Census, Economics and Statistics Administration, U.S. Department of Commerce. Population estimates. Available at http://eire.census.gov/popest/estimates.php.
5. Frome EL. The analysis of rates using Poisson regression models. Biometrics 1983;39:665–74.
6. Daniels NA, Ray B, Easton A, et al. Emergence of a new *Vibrio parahaemolyticus* serotype in raw oysters: a prevention quandary. JAMA 2000;284:1541–5.
7. Hogue A, White P, Guard-Petter J, et al. Epidemiology and control of egg-associated *Salmonella* Enteritidis in the United States of America. Rev Sci Tech 1997;16:542–53.
8. CDC. Outbreak of multidrug-resistant *Salmonella* Newport—United States, January–April 2002. MMWR 2002;51:545–8.
9. Kretsinger K, Noviello S, Moll M, et al. Tomatoes sicken hundreds: multistate outbreak of *Salmonella* Newport. Presented at the 52nd Annual Epidemic Intelligence Service Conference. Atlanta, Georgia, April 2003.
10. U.S. Department of Agriculture. Pathogen reduction/HACCP & HACCP implementation. Available at http://www.fsis.usda.gov/oa/haccp/imphaccp.htm.

Update: Adverse Events Following Civilian Smallpox Vaccination — United States, 2003

During January 24–April 13, 2003, smallpox vaccine was administered to 32,644 civilian health-care and public health workers in 54 jurisdictions as part of an effort to prepare the United States for a possible terrorist attack using smallpox virus. This report updates information on all vaccine-associated adverse events among civilians vaccinated since the beginning of the vaccination program and among contacts of vaccinees, received by CDC from the Vaccine Adverse Event Reporting System (VAERS) as of April 13.

In this vaccination program, CDC, the Food and Drug Administration, and state health departments are conducting surveillance for vaccine-associated adverse events among civilian vaccinees (*1*). As part of the vaccination program, civilian vaccinees receive follow-up care, and persons with reported adverse events after vaccination receive necessary medical attention. The U.S. Department of Defense is conducting surveillance for vaccine-associated adverse events among military vaccinees and providing follow-up care to those persons with reported adverse events.

e asy.

MMWR Online makes it possible for you to access vital public health reports and news as soon as CDC publishes them. Get the information you want, when you need it, from a trusted source.

Visit **cdc.gov/mmwr** and stay current on important public health topics–the easy way.

know what matters.

Adverse events that have been associated with smallpox vaccination are classified on the basis of evidence supporting the reported diagnoses. Cases verified by virologic testing are classified as confirmed. Cases are classified as probable if possible alternative etiologies are investigated and excluded and supportive information for the diagnosis is found. Cases are classified as suspected if they have clinical features compatible with the diagnosis, but either further investigation is required or investigation of the case did not provide supporting evidence for the diagnosis. All reports of events that follow vaccination are accepted (i.e., events associated temporally); however, reported adverse events are not necessarily associated causally with vaccination, and some or all of these events might be coincidental.

As of April 13, a total of 10 cases of myopericarditis have been reported (Table 1); three are new reports received during April 5–13. During the same period, one new case of generalized vaccinia and seven new cases of inadvertent inoculation (nonocular) were reported. During the vaccination program, no cases of eczema vaccinatum, erythema multiforme major, fetal vaccinia, postvaccinial encephalitis or encephalomyelitis, progressive vaccinia, or pyogenic infection of the vaccination site have been reported (Table 1).

During April 5–13, eight other serious adverse events were reported. Discharge diagnoses for these events were atypical chest pain (n = six), hypertension (n = one), and pneumonia (n = one) (Table 2).

During April 5–13, a total of 77 other nonserious events were reported (Table 2). Among the 327 vaccinees with reported other nonserious adverse events during January 24–April 13 (Table 2), the most common signs and symptoms were fever (n = 68), rash (n = 59), headache (n = 49), pain (n = 49), and pruritus (n = 45). All of these commonly reported events are consistent with mild expected reactions following receipt of smallpox vaccine. Some vaccinees reported multiple signs and symptoms.

During this reporting period, no vaccinia immune globulin was released for civilian vaccinees. No cases of vaccine transmission from civilian vaccinees to their contacts have been reported during the vaccination program (Table 3). Thirteen cases of transmission from military personnel to civilian contacts have been reported.

Surveillance for adverse events during the civilian and military smallpox vaccination programs is ongoing; regular surveillance reports will be published in *MMWR*.

TABLE 2. Number of cases* of other adverse events reported after smallpox vaccination among civilians, by severity — United States, January 24–April 13, 2003

Adverse events	No. new cases (April 5–13)	Total (January 24–April 13)
Other serious adverse events†	8§	37
Other nonserious adverse events¶	77	327

* Under investigation or completed as of April 13, 2003; numbers and classifications of adverse events will be updated regularly in *MMWR* as more information becomes available.
† Events that result in hospitalization, permanent disability, life-threatening illness, or death. These events are associated temporally with vaccination, but are not necessarily causally associated with vaccination.
§ Include atypical chest pain (n = six), hypertension (n = one), and pneumonia (n = one).
¶ Include expected self-limited responses to smallpox vaccination (e.g., fatigue, headache, pruritis, local reaction at vaccination site, regional lymphadenopathy, lymphangitis, fever, myalgias and chills, and nausea); additional events are associated temporally with smallpox vaccination but are not necessarily causally associated with vaccination.

TABLE 1. Number of cases* of selected adverse events associated with smallpox vaccination among civilians, by type — United States, January 24–April 13, 2003

Adverse events	No. new cases (April 5–13)			Total (January 24–April 13)		
	Suspected†	Probable§	Confirmed¶	Suspected	Probable	Confirmed
Eczema vaccinatum	—**	—	—	—	—	—
Erythema multiforme major (Stevens-Johnson syndrome)	—	—	NA††	—	—	NA
Fetal vaccinia	—	—	—	—	—	—
Generalized vaccinia	1	—	—	7	—	1
Inadvertent inoculation (nonocular)	7	—	—	27	—	2
Myocarditis/Pericarditis	3	—	—	6	4	—
Ocular vaccinia	—	—	—	—	—	2
Postvaccinial encephalitis or encephalomyelitis	—	—	NA	—	—	NA
Progressive vaccinia	—	—	—	—	—	—
Pyogenic infection of vaccination site	—	—	—	—	—	—

* Under investigation or completed as of April 13, 2003; numbers and classifications of adverse events will be updated regularly in *MMWR* as more information becomes available.
† Events are classified as suspected if they have clinical features compatible with the diagnosis but either further investigation is required or additional investigation of the case did not provide supporting evidence for the diagnosis and did not identify an alternative diagnosis.
§ Events are classified as probable if possible alternative etiologies are investigated and excluded and supportive information for the diagnosis is found.
¶ Events are classified as confirmed if virologic tests are positive.
** No cases reported.
†† Not applicable.

TABLE 3. Vaccinia immune globulin release and vaccinia transmission to contacts — United States, January 24–April 13, 2003

Events	No. new cases (April 5–13)	Total (January 24–April 13)
Vaccinia immune globulin release	0	1
Vaccinia transmission to contacts*		
Health-care settings	0	0
Other settings	0	0

* No cases of transmission from civilian vaccinees have been reported.

Reference

1. CDC. Smallpox Vaccine Adverse Events Monitoring and Response System for the first stage of the smallpox vaccination program. MMWR 2002;52:88–9.

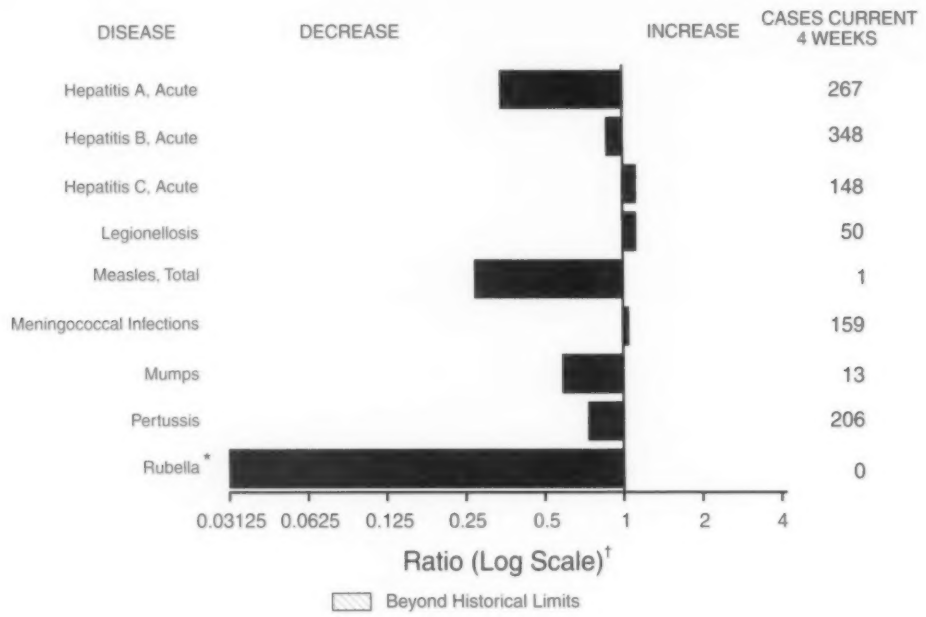
Erratum: Vol. 52, No. 14

In the article, "Outbreak of Severe Acute Respiratory Syndrome (SARS) and Coronavirus Testing—United States, 2003," on page 301, an error occurred in the eighth sentence of the fifth paragraph of the editorial note. The sentence should read, "Enforced isolation in the United States is used primarily to restrict patients with pulmonary tuberculosis who remain infectious but are unable or unwilling to remain in settings where they are less likely to transmit illness."

Clarification: Vol. 51, No. 40

In the Notice to Readers, "Recommended Adult Immunization Schedule—United States, 2002–2003," the eighth footnote in Figure 1 incorrectly implied that the Advisory Committee on Immunization Practices recommended that adults born after 1956 and without a history of measles vaccination should receive 2 doses of measles, mumps, rubella (MMR) vaccine. Adults born in or after 1957 should receive at least 1 dose of MMR unless they have a medical contraindication, documentation of at least 1 dose of MMR or other live measles vaccine, or other acceptable evidence of immunity. A second dose of MMR is recommended for adults who 1) were recently exposed to measles in an outbreak setting, 2) were previously vaccinated with killed measles virus vaccine, 3) were vaccinated with an unknown vaccine during 1963–1967, 4) are students in post-secondary educational institutions; 5) work in health-care facilities, and/or 6) plan to travel internationally.

FIGURE I. Selected notifiable disease reports, United States, comparison of provisional 4-week totals ending April 12, 2003, with historical data



* No rubella cases were reported for the current 4-week period yielding a ratio for week 15 of zero (0).
† Ratio of current 4-week total to mean of 15 4-week totals (from previous, comparable, and subsequent 4-week periods for the past 5 years). The point where the hatched area begins is based on the mean and two standard deviations of these 4-week totals.

TABLE I. Summary of provisional cases of selected notifiable diseases, United States, cumulative, week ending April 12, 2003 (15th Week)*

	Cum. 2003	Cum. 2002		Cum. 2003	Cum. 2002
Anthrax	-	1	Hansen disease (leprosy)†	18	23
Botulism:	-	-	Hantavirus pulmonary syndrome†	4	1
foodborne	4	5	Hemolytic uremic syndrome, postdiarrheal†	30	25
infant	14	21	HIV infection, pediatric†§	75	48
other (wound & unspecified)	7	6	Measles, total	4¶	9**
Brucellosis†	13	22	Mumps	60	86
Chancroid	10	20	Plague	-	-
Cholera	-	1	Poliomyelitis, paralytic	-	-
Cyclosporiasis†	10	28	Psittacosis†	2	11
Diphtheria	-	-	Q fever†	17	13
Ehrlichiosis:	-	-	Rabies, human	-	1
human granulocytic (HGE)†	9	16	Rubella	1	1
human monocytic (HME)†	9	8	Rubella, congenital	-	2
other and unspecified	-	-	Streptococcal toxic-shock syndrome†	45	45
Encephalitis/Meningitis:	-	-	Tetanus	1	5
California serogroup viral†	-	-	Toxic-shock syndrome	29	41
eastern equine†	-	-	Trichinosis	2	4
Powassan†	-	-	Tularemia†	4	5
St. Louis†	-	-	Yellow fever	-	1
western equine†	-	-			

-: No reported cases.
* Incidence data for reporting years 2002 and 2003 are provisional and cumulative (year-to-date).
† Not notifiable in all states.
§ Updated monthly from reports to the Division of HIV/AIDS Prevention — Surveillance and Epidemiology, National Center for HIV, STD, and TB Prevention (NCHSTP). Last update March 30, 2003.
¶ Of four cases reported, three were indigenous and one was imported from another country.
** Of nine cases reported, four were indigenous and five were imported from another country.

TABLE II. Provisional cases of selected notifiable diseases, United States, weeks ending April 12, 2003, and April 13, 2002 (15th Week)*

Reporting area	AIDS		Chlamydia†		Coccidiodomycosis		Cryptosporidiosis		Encephalitis/Meningitis West Nile	
	Cum. 2003§	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002
UNITED STATES	8,129	10,083	211,019	225,819	1,036	1,074	439	626	-	-
NEW ENGLAND	277	314	7,312	7,657	-	-	24	26	-	-
Maine	-	1	249	411	N	N	2	-	-	-
N.H.	5	8	396	468	-	-	-	6	-	-
Vt.	5	5	308	219	-	-	5	5	-	-
Mass.	49	173	3,065	2,981	-	-	11	8	-	-
R.I.	30	34	903	780	-	-	4	4	-	-
Conn.	188	93	2,391	2,798	N	N	2	3	-	-
MID. ATLANTIC	1,909	2,082	19,865	25,072	-	-	48	91	-	-
Upstate N.Y.	93	145	4,945	4,013	N	N	17	16	-	-
N.Y. City	1,108	1,281	5,527	8,619	-	-	12	39	-	-
N.J.	230	391	2,776	3,763	-	-	3	6	-	-
Pa.	478	265	6,617	8,677	N	N	16	30	-	-
E.N. CENTRAL	708	963	34,040	40,044	2	6	86	179	-	-
Ohio	111	191	7,458	10,957	-	-	17	40	-	-
Ind.	121	133	4,719	4,844	N	N	7	16	-	-
Ill.	271	475	10,433	10,743	-	1	8	33	-	-
Mich.	168	116	7,240	8,713	2	5	24	34	-	-
Wis.	37	48	4,190	4,787	-	-	30	56	-	-
W.N. CENTRAL	148	144	13,110	12,503	-	-	46	55	-	-
Minn.	23	27	2,499	2,982	N	N	27	18	-	-
Iowa	20	32	1,243	1,159	N	N	7	5	-	-
Mo.	77	46	4,963	4,169	-	-	2	10	-	-
N. Dak.	-	-	372	339	N	N	2	5	-	-
S. Dak.	3	2	715	618	-	-	6	3	-	-
Nebr.	8	16	1,237	1,095	-	-	2	11	-	-
Kans.	17	21	2,081	2,141	N	N	-	3	-	-
S. ATLANTIC	2,216	3,477	42,772	42,475	1	-	83	123	-	-
Del.	30	57	890	772	N	N	1	1	-	-
Md.	47	419	4,593	4,364	1	-	7	3	-	-
D.C.	163	152	741	962	-	-	-	3	-	-
Va.	216	229	4,871	4,860	-	-	7	1	-	-
W. Va.	5	19	721	684	N	N	-	1	-	-
N.C.	211	260	6,713	5,895	N	N	10	15	-	-
S.C.	160	253	3,973	4,006	-	-	1	2	-	-
Ga.	220	649	9,212	9,107	-	-	37	62	-	-
Fla.	1,164	1,439	11,058	11,825	N	N	20	35	-	-
E.S. CENTRAL	339	404	14,647	15,316	N	N	29	32	-	-
Ky.	10	46	2,463	2,564	N	N	6	1	-	-
Tenn.	170	185	5,328	4,734	N	N	7	17	-	-
Ala.	73	85	3,731	4,814	-	-	14	12	-	-
Miss.	86	88	3,125	3,204	N	N	2	2	-	-
W.S. CENTRAL	1,005	1,047	28,300	30,879	-	-	11	11	-	-
Ark.	34	58	1,707	1,999	-	-	1	3	-	-
La.	133	258	4,369	5,178	N	N	-	2	-	-
Okla.	49	48	2,436	2,932	N	N	3	2	-	-
Tex.	789	683	19,788	20,770	-	-	7	4	-	-
MOUNTAIN	351	313	11,776	13,839	760	683	22	32	-	-
Mont.	6	4	410	634	N	N	2	1	-	-
Idaho	-	6	740	666	N	N	4	10	-	-
Wyo.	1	3	295	246	-	-	1	4	-	-
Colo.	76	63	2,290	4,012	N	N	5	6	-	-
N. Mex.	27	11	818	2,347	-	4	-	3	-	-
Ariz.	168	133	4,497	4,172	748	668	3	4	-	-
Utah	42	18	1,178	9	1	2	5	1	-	-
Nev.	31	75	1,548	1,753	11	9	2	3	-	-
PACIFIC	1,176	1,339	39,197	38,034	273	385	90	77	-	-
Wash.	89	141	4,234	3,924	N	N	-	-	-	-
Oreg.	50	127	2,040	1,887	-	-	8	11	-	-
Calif.	1,026	1,053	30,734	30,031	273	385	82	65	-	-
Alaska	8	2	978	1,001	-	-	-	-	-	-
Hawaii	3	16	1,211	1,191	-	-	-	1	-	-
Guam	1	-	-	-	-	-	-	-	-	-
P.R.	58	273	247	13	N	N	N	N	-	-
V.I.	2	51	-	55	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	2	U	-	U	-	U	-	U	-	U

N: Not notifiable. U: Unavailable. -: No reported cases. C.N.M.I.: Commonwealth of Northern Mariana Islands.

* Incidence data for reporting years 2002 and 2003 are provisional and cumulative (year-to-date).

† Chlamydia refers to genital infections caused by *C. trachomatis*.

§ Updated monthly from reports to the Division of HIV/AIDS Prevention — Surveillance and Epidemiology, National Center for HIV, STD, and TB Prevention. Last update March 30, 2003.

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending April 12, 2003, and April 13, 2002 (15th Week)*

Reporting area	*Escherichia coli*, Enterohemorrhagic (EHEC)						Giardiasis		Gonorrhea	
	O157:H7		Shiga toxin positive, serogroup non-O157		Shiga toxin positive, not serogrouped					
	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002
UNITED STATES	258	351	32	13	15	3	3,720	4,888	81,520	98,054
NEW ENGLAND	15	29	4	1	-	1	223	469	1,882	2,310
Maine	1	1	-	-	-	-	34	48	21	24
N.H.	3	2	-	-	-	-	13	16	29	35
Vt.	-	1	-	-	-	-	19	29	27	30
Mass.	6	15	-	1	-	1	127	241	762	1,004
R.I.	1	3	-	-	-	-	29	34	284	264
Conn.	4	7	4	-	-	-	1	101	759	953
MID. ATLANTIC	14	29	-	-	4	-	651	1,088	8,149	11,747
Upstate N.Y.	8	23	-	-	4	-	212	270	1,962	2,234
N.Y. City	2	-	-	-	-	-	284	444	2,301	3,568
N.J.	4	6	-	-	-	-	48	129	1,497	2,259
Pa.	N	N	-	-	-	-	107	245	2,389	3,686
E.N. CENTRAL	59	106	7	-	3	-	588	840	16,364	19,734
Ohio	16	16	7	-	3	-	218	240	4,546	5,922
Ind.	8	8	-	-	-	-	-	-	1,828	2,208
Ill.	8	30	-	-	-	-	131	237	5,086	5,902
Mich.	15	23	-	-	-	-	172	233	3,422	4,093
Wis.	12	29	-	-	-	-	67	130	1,482	1,609
W.N. CENTRAL	39	47	3	4	5	-	388	429	4,492	5,078
Minn.	13	14	3	3	-	-	130	157	634	904
Iowa	3	9	-	-	-	-	61	62	246	322
Mo.	15	13	N	N	N	N	103	116	2,405	2,467
N. Dak.	1	-	-	-	1	-	9	3	11	17
S. Dak.	2	1	-	-	-	-	14	18	41	71
Nebr.	4	7	-	1	-	-	40	35	405	396
Kans.	1	3	-	-	4	-	31	38	750	901
S. ATLANTIC	36	42	8	5	-	-	709	751	21,358	25,075
Del.	-	2	N	N	N	N	14	14	379	489
Md.	1	-	-	-	-	-	29	29	2,235	2,444
D.C.	1	-	-	-	-	-	9	12	551	805
Va.	3	6	-	-	-	-	71	47	2,310	2,957
W. Va.	1	-	-	-	-	-	7	9	241	285
N.C.	8	8	-	-	-	-	N	N	3,770	4,599
S.C.	-	-	-	-	-	-	26	7	2,192	2,352
Ga.	10	21	1	4	-	-	302	230	4,681	4,871
Fla.	12	5	7	1	-	-	251	403	4,999	6,273
E.S. CENTRAL	11	10	-	-	-	-	83	86	7,204	8,657
Ky.	2	2	-	-	-	-	N	N	1,015	993
Tenn.	5	6	-	-	-	-	33	37	2,309	2,631
Ala.	3	1	-	-	-	-	50	49	2,248	3,083
Miss.	1	1	-	-	-	-	-	-	1,632	1,950
W.S. CENTRAL	9	9	4	-	2	1	58	29	11,632	13,879
Ark.	2	1	-	-	-	-	32	29	996	1,250
La.	-	-	-	-	-	-	3	-	2,798	3,317
Okla.	-	-	-	-	-	-	23	-	970	1,256
Tex.	7	8	4	-	2	1	-	-	6,868	8,056
MOUNTAIN	30	26	5	1	1	1	318	320	2,678	3,196
Mont.	1	4	-	-	-	-	12	17	29	36
Idaho	9	1	3	-	-	-	42	10	25	25
Wyo.	-	-	-	1	-	-	5	3	15	20
Colo.	8	3	1	-	1	1	84	119	667	1,104
N. Mex.	-	2	1	-	-	-	12	37	164	434
Ariz.	8	4	N	N	N	N	61	47	1,204	1,030
Utah	4	6	-	-	-	-	73	52	107	2
Nev.	-	6	-	-	-	-	29	35	467	545
PACIFIC	45	53	1	2	-	-	702	876	7,761	8,378
Wash.	15	6	-	-	-	-	48	70	800	870
Oreg.	7	18	1	2	-	-	81	118	259	253
Calif.	23	26	-	-	-	-	528	632	6,294	6,911
Alaska	-	-	-	-	-	-	22	21	154	180
Hawaii	-	3	-	-	-	-	23	35	254	164
Guam	N	N	-	-	-	-	-	-	-	-
P.R.	-	-	-	-	-	-	4	1	23	4
V.I.	-	-	-	-	-	-	-	-	-	18
Amer. Samoa	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	-	U	-	U	-	U	-	U	-	U

N: Not notifiable. U: Unavailable. -: No reported cases.
* Incidence data for reporting years 2002 and 2003 are provisional and cumulative (year-to-date).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending April 12, 2003, and April 13, 2002 (15th Week)*

Reporting area	*Haemophilus influenzae*, invasive								Hepatitis (viral, acute), by type	
	All ages		Age <5 years							
	All serotypes		Serotype B		Non-serotype B		Unknown serotype		A	
	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002
UNITED STATES	430	587	2	6	64	103	9	6	1,467	2,940
NEW ENGLAND	36	41	-	-	1	4	2	2	53	111
Maine	2	1	-	-	-	-	1	-	2	4
N.H.	5	4	-	-	-	-	-	-	3	6
Vt.	5	3	-	-	-	-	-	-	1	-
Mass.	16	23	-	-	1	2	1	2	32	57
R.I.	1	-	-	-	-	-	-	-	4	5
Conn.	7	10	-	-	-	2	-	-	11	39
MID. ATLANTIC	66	115	-	1	11	17	1	-	181	383
Upstate N.Y.	28	44	-	1	7	7	-	-	28	51
N.Y. City	13	31	-	-	3	6	-	-	93	197
N.J.	12	28	-	-	1	3	-	-	29	60
Pa.	13	12	-	-	-	1	1	-	31	75
E.N. CENTRAL	51	113	1	1	9	20	-	-	157	352
Ohio	19	37	-	-	5	5	-	-	30	86
Ind.	13	16	-	-	1	5	-	-	12	17
Ill.	14	37	-	-	3	6	-	-	44	128
Mich.	5	5	1	1	-	-	-	-	59	75
Wis.	-	18	-	-	-	4	-	-	12	46
W.N. CENTRAL	30	16	-	-	4	1	2	2	56	112
Minn.	14	12	-	-	4	1	-	1	14	14
Iowa	-	1	-	-	-	-	-	-	15	24
Mo.	10	2	-	-	-	-	2	1	11	24
N. Dak.	-	-	-	-	-	-	-	-	-	-
S. Dak.	1	-	-	-	-	-	-	-	-	3
Nebr.	-	-	-	-	-	-	-	-	4	6
Kans.	5	1	-	-	-	-	-	-	12	41
S. ATLANTIC	107	133	-	-	10	24	-	-	399	831
Del.	-	-	-	-	-	-	-	-	3	6
Md.	23	37	-	-	2	1	-	-	45	93
D.C.	-	-	-	-	-	-	-	-	9	30
Va.	9	9	-	-	3	2	-	-	21	27
W. Va.	3	2	-	-	-	-	-	-	4	9
N.C.	10	11	-	-	-	1	-	-	26	96
S.C.	2	3	-	-	-	1	-	-	12	14
Ga.	23	44	-	-	2	13	-	-	149	189
Fla.	37	27	-	-	3	6	-	-	130	367
E.S. CENTRAL	36	25	-	1	5	6	-	-	45	100
Ky.	2	3	-	-	-	-	-	-	9	25
Tenn.	20	12	-	-	3	3	-	-	23	42
Ala.	12	5	-	1	1	2	-	-	9	10
Miss.	2	5	-	-	1	1	-	-	4	23
W.S. CENTRAL	24	24	-	2	3	4	-	-	84	203
Ark.	4	1	-	-	1	-	-	-	2	13
La.	5	2	-	-	-	-	-	-	12	14
Okla.	15	19	-	-	2	4	-	-	4	12
Tex.	-	2	-	2	-	-	-	-	66	164
MOUNTAIN	58	61	1	1	15	13	3	1	109	177
Mont.	-	-	-	-	-	-	-	-	1	5
Idaho	-	1	-	-	-	-	-	-	-	15
Wyo.	-	1	-	-	-	-	-	-	1	2
Colo.	13	14	-	-	4	2	-	-	10	25
N. Mex.	7	13	-	-	3	4	1	-	7	4
Ariz.	28	19	1	-	5	4	-	-	67	90
Utah	6	10	-	1	3	2	-	-	8	12
Nev.	4	3	-	-	-	1	2	1	15	24
PACIFIC	22	59	-	-	6	14	1	1	383	671
Wash.	3	-	-	-	2	-	1	-	15	47
Oreg.	13	28	-	-	3	4	-	-	25	35
Calif.	1	15	-	-	1	7	-	1	337	571
Alaska	-	1	-	-	-	1	-	-	3	7
Hawaii	5	15	-	-	-	2	-	-	3	11
Guam	-	-	-	-	-	-	-	-	-	-
P.R.	-	-	-	-	-	-	-	-	4	43
V.I.	-	-	-	-	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	-	U	-	U	-	U	-	U	-	U

N: Not notifiable. U: Unavailable. -: No reported cases.

* Incidence data for reporting years 2002 and 2003 are provisional and cumulative (year-to-date).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending April 12, 2003, and April 13, 2002 (15th Week)*

Reporting area	Hepatitis (viral, acute), by type: B Cum. 2003	B Cum. 2002	C Cum. 2003	C Cum. 2002	Legionellosis Cum. 2003	Legionellosis Cum. 2002	Listeriosis Cum. 2003	Listeriosis Cum. 2002	Lyme disease Cum. 2003	Lyme disease Cum. 2002
UNITED STATES	1,683	1,886	473	522	234	203	102	110	1,178	1,444
NEW ENGLAND	56	63	-	12	9	7	6	10	85	140
Maine	-	1	-	-	-	1	-	2	-	-
N.H.	3	5	-	-	-	1	1	2	3	14
Vt.	1	2	-	4	1	-	-	-	3	1
Mass.	49	43	-	8	3	3	3	4	7	118
R.I.	1	-	-	-	1	-	-	-	32	3
Conn.	2	12	-	-	4	2	2	2	40	4
MID. ATLANTIC	291	525	31	25	30	56	11	21	870	1,067
Upstate N.Y.	26	34	13	16	16	12	3	9	504	634
N.Y. City	111	341	-	-	6	12	5	5	-	60
N.J.	140	88	-	4	2	11	2	1	115	206
Pa.	14	62	18	5	6	21	1	6	251	167
E.N. CENTRAL	120	160	68	35	53	68	9	18	12	40
Ohio	41	25	3	-	27	30	3	9	8	5
Ind.	4	6	1	-	3	4	1	1	4	2
Ill.	1	21	4	9	2	7	-	1	-	-
Mich.	62	97	60	26	21	18	5	4	-	-
Wis.	12	11	-	-	-	9	-	3	U	33
W.N. CENTRAL	74	69	72	232	8	14	3	4	21	14
Minn.	5	1	1	-	2	1	1	-	14	8
Iowa	4	8	-	1	3	3	-	1	2	3
Mo.	48	40	70	228	1	6	-	1	3	3
N. Dak.	-	-	-	-	1	-	-	1	-	-
S. Dak.	1	-	-	-	-	1	-	-	-	-
Nebr.	10	11	1	3	-	3	2	-	-	-
Kans.	6	9	-	-	1	-	-	1	2	-
S. ATLANTIC	545	500	68	34	81	22	30	14	142	126
Del.	2	4	-	3	-	3	N	N	26	20
Md.	31	44	5	4	15	6	4	3	77	79
D.C.	1	5	-	-	1	-	-	-	2	6
Va.	28	62	-	-	4	2	2	1	9	2
W. Va.	2	9	-	-	N	N	1	-	-	-
N.C.	50	46	3	6	7	3	6	1	17	12
S.C.	33	19	20	3	2	3	1	2	-	1
Ga.	209	174	3	4	7	4	8	3	2	-
Fla.	189	137	37	14	45	1	8	4	9	6
E.S. CENTRAL	92	96	24	68	4	5	4	6	10	7
Ky.	16	13	5	1	-	3	-	1	2	3
Tenn.	37	42	1	11	2	-	-	2	5	-
Ala.	22	20	4	2	1	2	3	3	-	2
Miss.	17	21	14	54	1	-	1	-	3	2
W.S. CENTRAL	64	118	175	81	14	5	5	8	4	21
Ark.	2	39	-	5	-	-	-	-	-	-
La.	26	18	16	9	-	1	-	-	2	1
Okla.	8	1	-	-	2	1	1	3	-	-
Tex.	28	60	159	67	12	3	4	5	2	20
MOUNTAIN	169	113	17	9	13	7	11	8	5	3
Mont.	4	2	1	-	-	1	1	-	-	-
Idaho	-	2	-	-	1	-	-	-	1	1
Wyo.	2	6	-	2	1	-	-	-	-	-
Colo.	24	24	12	2	2	2	5	2	1	-
N. Mex.	5	20	-	-	1	1	1	-	-	1
Ariz.	102	39	3	-	4	-	4	4	-	1
Utah	12	9	-	-	2	3	-	2	2	-
Nev.	20	11	1	5	2	-	-	-	1	-
PACIFIC	272	242	18	26	22	19	23	21	29	26
Wash.	13	14	1	3	2	1	1	1	-	-
Oreg.	37	42	4	7	N	N	1	2	6	1
Calif.	212	179	12	16	20	18	21	18	22	25
Alaska	6	5	-	-	-	-	-	-	1	-
Hawaii	4	2	1	-	-	-	-	-	N	N
Guam	-	-	-	-	-	-	-	-	-	-
P.R.	6	24	-	-	-	-	-	-	N	N
V.I.	-	-	-	-	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	-	U	-	U	-	U	-	U	-	U

N: Not notifiable. U: Unavailable. -: No reported cases.
* Incidence data for reporting years 2002 and 2003 are provisional and cumulative (year-to-date).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending April 12, 2003, and April 13, 2002 (15th Week)*

Reporting area	Malaria		Meningococcal disease		Pertussis		Rabies, animal		Rocky Mountain spotted fever	
	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002
UNITED STATES	231	322	575	620	1,174	1,682	992	1,744	75	85
NEW ENGLAND	6	17	28	43	177	215	107	216	1	-
Maine	1	1	3	3	1	3	11	12	-	-
N.H.	1	4	1	4	10	2	3	5	-	-
Vt.	-	-	-	3	18	36	7	44	-	-
Mass.	4	8	20	24	147	168	42	73	1	-
R.I.	-	-	1	2	1	-	9	6	-	-
Conn.	-	4	3	7	-	6	35	76	-	-
MID. ATLANTIC	42	90	37	70	100	92	71	236	5	13
Upstate N.Y.	13	11	9	22	67	65	70	140	-	1
N.Y. City	21	56	9	15	-	5	1	8	2	3
N.J.	2	13	7	10	6	-	-	25	3	1
Pa.	6	10	12	23	27	22	-	63	-	8
E.N. CENTRAL	22	42	78	87	104	219	8	6	1	2
Ohio	5	7	27	32	71	122	2	1	1	2
Ind.	-	2	14	11	9	15	2	1	-	-
Ill.	8	14	13	14	-	36	1	1	-	-
Mich.	9	14	18	16	13	22	3	1	-	-
Wis.	-	5	6	14	11	24	-	2	-	-
W.N. CENTRAL	7	19	52	53	65	157	151	99	2	6
Minn.	5	8	11	10	33	59	6	7	-	-
Iowa	2	2	7	6	9	37	21	10	1	-
Mo.	-	4	26	24	13	37	4	5	1	6
N. Dak.	-	-	-	-	-	-	16	1	-	-
S. Dak.	-	-	1	2	2	5	6	24	-	-
Nebr.	-	2	3	7	1	3	32	-	-	-
Kans.	-	3	4	4	7	16	66	52	-	-
S. ATLANTIC	70	82	114	92	140	104	505	570	60	55
Del.	-	1	7	4	1	1	-	3	-	-
Md.	21	22	11	3	17	14	2	108	7	6
D.C.	3	2	-	-	-	-	-	-	-	-
Va.	6	6	6	14	33	35	151	144	1	1
W. Va.	2	-	1	-	1	3	20	42	-	-
N.C.	6	7	16	11	53	13	198	165	47	32
S.C.	2	2	4	11	4	21	36	20	3	6
Ga.	6	36	14	14	14	11	63	59	-	10
Fla.	24	6	55	35	17	6	35	29	2	-
E.S. CENTRAL	6	4	22	27	26	55	14	121	4	6
Ky.	1	1	-	4	4	12	9	7	-	-
Tenn.	3	1	5	7	12	28	-	108	3	5
Ala.	2	-	7	9	8	8	5	6	-	1
Miss.	-	2	10	7	2	7	-	-	1	-
W.S. CENTRAL	15	2	98	75	66	354	75	376	-	1
Ark.	1	-	7	10	-	206	25	-	-	-
La.	1	2	19	7	4	3	-	-	-	-
Okla.	-	-	5	7	2	12	50	27	-	-
Tex.	13	-	67	51	60	133	-	349	-	1
MOUNTAIN	9	10	19	42	230	189	20	50	1	1
Mont.	-	-	2	1	-	2	3	4	-	-
Idaho	1	-	2	2	9	22	-	-	-	-
Wyo.	-	-	-	-	44	5	-	1	-	-
Colo.	7	5	4	14	90	100	-	-	-	-
N. Mex.	-	-	2	1	15	24	-	-	-	-
Ariz.	1	2	6	12	47	20	17	45	1	-
Utah	-	2	-	1	19	10	-	-	-	-
Nev.	-	1	3	11	6	6	-	-	-	1
PACIFIC	54	56	127	131	266	297	41	70	1	1
Wash.	7	3	10	21	67	101	-	-	-	-
Oreg.	5	1	24	17	72	15	-	-	-	-
Calif.	42	49	87	89	127	175	38	47	1	1
Alaska	-	1	-	1	-	2	3	23	-	-
Hawaii	-	2	6	3	-	4	-	-	-	-
Guam	-	-	-	-	-	-	-	-	-	-
P.R.	-	-	1	1	-	-	17	18	N	N
V.I.	-	-	-	-	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	-	U	-	U	-	U	-	U	-	U

N: Not notifiable. U: Unavailable. - : No reported cases.
* Incidence data for reporting years 2002 and 2003 are provisional and cumulative (year-to-date).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending April 12, 2003, and April 13, 2002 (15th Week)*

Reporting area	Salmonellosis		Shigellosis		Streptococcal disease, invasive, group A		*Streptococcus pneumoniae*, invasive			
							Drug resistant, all ages		Age <5 years	
	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002
UNITED STATES	6,553	7,941	5,108	3,991	1,665	1,512	796	753	105	79
NEW ENGLAND	311	396	79	71	108	78	3	1	1	1
Maine	21	46	3	2	12	15	-	-	-	-
N.H.	18	19	-	3	11	18	-	-	N	N
Vt.	6	16	2	-	11	2	3	1	1	1
Mass.	177	218	48	50	73	43	N	N	N	N
R.I.	17	12	2	2	1	-	-	-	-	-
Conn.	72	85	24	14	-	-	-	-	-	-
MID. ATLANTIC	564	1,199	299	279	213	292	33	38	25	23
Upstate N.Y.	158	243	76	38	129	125	21	38	19	23
N.Y. City	216	423	103	126	30	75	U	U	U	U
N.J.	60	257	66	60	13	61	N	N	N	N
Pa.	130	276	54	55	41	31	12	-	6	-
E.N. CENTRAL	901	1,322	332	496	372	368	161	63	52	35
Ohio	311	323	76	248	113	75	110	-	39	-
Ind.	79	73	33	18	30	15	51	61	8	10
Ill.	267	519	130	150	67	125	-	2	-	-
Mich.	149	231	65	45	145	101	N	N	N	N
Wis.	95	176	28	35	17	52	N	N	5	25
W.N. CENTRAL	411	518	202	362	129	98	90	198	13	16
Minn.	109	115	23	39	55	48	-	128	13	15
Iowa	85	68	10	34	N	N	N	N	N	N
Mo.	115	207	67	40	27	24	4	4	-	1
N. Dak.	9	5	-	-	5	-	3	-	-	-
S. Dak.	18	21	8	119	12	4	-	1	-	-
Nebr.	31	31	69	89	15	7	4	20	N	N
Kans.	44	71	25	41	15	15	79	45	N	N
S. ATLANTIC	1,869	1,948	2,093	1,530	334	236	430	344	3	1
Del.	16	12	85	5	4	-	-	3	N	N
Md.	175	150	165	170	119	33	-	-	-	-
D.C.	10	22	15	18	5	3	2	26	-	1
Va.	154	171	76	294	22	30	N	N	N	N
W. Va.	15	19	-	2	11	2	17	21	3	-
N.C.	287	242	221	94	36	52	N	N	U	U
S.C.	76	78	54	17	9	20	35	74	N	N
Ga.	463	478	759	572	42	65	143	134	N	N
Fla.	673	776	718	358	86	31	233	86	N	N
E.S. CENTRAL	386	382	241	286	56	42	41	64	-	-
Ky.	79	56	35	46	10	5	1	8	N	N
Tenn.	128	121	76	17	46	37	40	56	N	N
Ala.	123	114	97	117	-	-	-	-	N	N
Miss.	56	91	33	106	-	-	-	-	-	-
W.S. CENTRAL	403	609	924	288	89	74	25	24	11	1
Ark.	72	72	16	39	2	-	6	4	-	-
La.	57	107	61	51	1	1	19	20	7	1
Okla.	52	64	175	61	29	13	N	N	4	-
Tex.	222	366	672	137	57	60	N	N	-	-
MOUNTAIN	458	421	259	140	194	141	12	21	-	2
Mont.	30	10	1	-	-	-	-	-	-	-
Idaho	57	25	5	2	10	4	N	N	N	N
Wyo.	5	16	1	1	-	3	3	8	-	-
Colo.	119	119	42	33	68	43	-	-	-	-
N. Mex.	31	66	36	39	47	41	9	13	-	-
Ariz.	141	100	145	48	62	41	-	-	N	N
Utah	47	31	15	9	7	9	-	-	-	2
Nev.	28	54	14	8	-	-	-	-	-	-
PACIFIC	1,250	1,146	679	539	170	183	1	-	-	-
Wash.	98	54	44	18	-	-	-	-	N	N
Oreg.	113	79	23	30	N	N	N	N	N	N
Calif.	967	940	596	473	139	167	N	N	N	N
Alaska	29	17	4	2	-	-	-	-	N	N
Hawaii	43	56	12	16	31	16	1	-	-	-
Guam	-	-	-	-	-	-	-	-	-	-
P.R.	24	62	1	1	N	N	N	N	N	N
V.I.	-	-	-	-	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	-	U	-	U	-	U	-	U	-	U

N: Not notifiable. U: Unavailable. - : No reported cases.
* Incidence data for reporting years 2002 and 2003 are provisional and cumulative (year-to-date).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending April 12, 2003, and April 13, 2002 (15th Week)*

Reporting area	Syphilis: Primary & secondary Cum. 2003	Syphilis: Primary & secondary Cum. 2002	Syphilis: Congenital Cum. 2003	Syphilis: Congenital Cum. 2002	Tuberculosis Cum. 2003	Tuberculosis Cum. 2002	Typhoid fever Cum. 2003	Typhoid fever Cum. 2002	Varicella (Chickenpox) Cum. 2003
UNITED STATES	1,800	1,750	89	119	1,882	2,937	63	87	3,685
NEW ENGLAND	50	20	-	-	71	101	6	7	664
Maine	2	-	-	-	-	5	-	-	337
N.H.	5	-	-	-	3	4	-	-	-
Vt.	-	-	-	-	-	1	-	-	248
Mass.	34	13	-	-	42	43	2	6	77
R.I.	6	1	-	-	5	18	2	-	2
Conn.	3	6	-	-	21	30	2	1	-
MID. ATLANTIC	190	186	18	17	403	488	8	28	2
Upstate N.Y.	5	8	8	1	44	68	3	3	N
N.Y. City	106	103	7	5	306	240	4	14	-
N.J.	46	42	3	10	-	120	1	8	-
Pa.	33	33	-	1	53	60	-	3	2
E.N. CENTRAL	256	353	22	15	243	269	4	10	1,957
Ohio	59	47	2	-	34	44	-	4	428
Ind.	10	19	3	-	32	29	1	1	-
Ill.	93	105	12	13	126	119	-	1	-
Mich.	90	175	5	2	48	57	3	3	1,299
Wis.	4	7	-	-	3	20	-	1	230
W.N. CENTRAL	46	23	1	-	102	117	-	4	10
Minn.	13	12	-	-	46	51	-	2	N
Iowa	3	-	-	-	6	-	-	-	N
Mo.	15	5	1	-	13	41	-	1	-
N. Dak.	-	-	-	-	-	-	-	-	10
S. Dak.	-	-	-	-	9	5	-	-	-
Nebr.	-	3	-	-	5	1	-	1	-
Kans.	15	3	-	-	23	19	-	-	-
S. ATLANTIC	490	429	12	29	282	562	15	12	755
Del.	2	6	-	-	-	-	-	-	3
Md.	80	45	-	3	44	58	2	2	-
D.C.	6	16	1	-	-	-	-	-	7
Va.	26	9	1	-	50	59	8	-	136
W. Va.	-	-	-	-	4	8	-	-	549
N.C.	53	98	5	8	57	76	2	-	N
S.C.	37	34	2	3	41	29	-	-	60
Ga.	96	72	2	7	72	103	1	6	-
Fla.	190	149	1	8	14	229	2	4	N
E.S. CENTRAL	108	183	10	11	178	203	2	2	-
Ky.	16	26	1	2	29	30	-	2	N
Tenn.	46	74	4	3	53	87	-	-	N
Ala.	40	62	4	4	72	59	2	-	-
Miss.	6	21	1	2	24	27	-	-	-
W.S. CENTRAL	243	222	13	30	212	536	-	4	207
Ark.	12	10	-	1	24	29	-	-	-
La.	29	41	-	-	-	-	-	-	3
Okla.	15	21	-	1	23	39	-	-	N
Tex.	187	150	13	28	165	468	-	4	204
MOUNTAIN	75	77	10	4	48	78	4	4	90
Mont.	-	-	-	-	-	-	-	-	N
Idaho	6	1	-	-	1	2	-	-	N
Wyo.	-	-	-	-	1	1	-	-	12
Colo.	3	10	2	1	13	19	3	1	-
N. Mex.	7	10	-	-	-	9	1	-	-
Ariz.	52	54	8	3	27	38	-	-	-
Utah	3	-	-	-	6	5	-	2	78
Nev.	4	2	-	-	-	4	-	1	-
PACIFIC	342	257	3	13	343	583	24	16	-
Wash.	18	18	-	-	64	61	-	-	-
Oreg.	12	4	-	-	23	23	2	2	-
Calif.	306	232	3	13	211	446	22	14	-
Alaska	-	-	-	-	16	18	-	-	-
Hawaii	6	3	-	-	29	35	-	-	-
Guam	-	-	-	-	-	-	-	-	-
P.R.	45	7	1	-	-	17	-	-	41
V.I.	-	1	-	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U	U
C.N.M.I.	-	U	-	U	-	U	-	U	-

N: Not notifiable. U: Unavailable. - : No reported cases.
* Incidence data for reporting years 2002 and 2003 are provisional and cumulative (year-to-date).

TABLE III. Deaths in 122 U.S. cities,* week ending April 12, 2003 (15th Week)

Reporting Area	All causes, by age (years)						P&I† Total
	All Ages	>65	45-64	25-44	1-24	<1	
NEW ENGLAND	523	362	102	43	7	9	50
Boston, Mass.	152	94	40	13	2	3	15
Bridgeport, Conn.	32	26	5	1	-	-	4
Cambridge, Mass.	11	9	-	2	-	-	-
Fall River, Mass.	23	19	1	2	1	-	4
Hartford, Conn.	52	23	15	9	-	5	3
Lowell, Mass.	27	20	7	-	-	-	3
Lynn, Mass.	8	6	2	-	-	-	1
New Bedford, Mass.	35	24	5	5	1	-	3
New Haven, Conn.	U	U	U	U	U	U	U
Providence, R.I.	55	45	9	-	1	-	-
Somerville, Mass.	7	6	1	-	-	-	1
Springfield, Mass.	39	24	8	6	1	-	5
Waterbury, Conn.	17	13	2	1	1	-	1
Worcester, Mass.	65	53	7	4	-	1	10
MID. ATLANTIC	2,257	1,554	465	129	54	41	132
Albany, N.Y.	50	42	3	-	3	2	6
Allentown, Pa.	17	16	-	1	-	-	2
Buffalo, N.Y.	100	76	17	4	-	3	5
Camden, N.J.	28	17	9	1	-	1	1
Elizabeth, N.J.	14	11	2	-	-	1	-
Erie, Pa.	42	33	6	1	2	-	3
Jersey City, N.J.	41	30	8	3	-	-	-
New York City, N.Y.	1,108	747	236	64	28	19	54
Newark, N.J.	43	17	14	9	2	1	4
Paterson, N.J.	18	11	6	1	-	-	1
Philadelphia, Pa.	398	270	89	25	10	4	26
Pittsburgh, Pa.§	26	14	9	1	-	2	3
Reading, Pa.	25	17	4	1	3	-	3
Rochester, N.Y.	136	94	33	6	2	1	11
Schenectady, N.Y.	21	19	2	-	-	-	-
Scranton, Pa.	30	21	5	4	-	-	-
Syracuse, N.Y.	91	65	14	3	3	6	7
Trenton, N.J.	23	17	3	2	-	1	1
Utica, N.Y.	20	17	1	1	1	-	1
Yonkers, N.Y.	26	20	4	2	-	-	4
E.N. CENTRAL	2,015	1,351	429	134	42	59	124
Akron, Ohio	104	77	18	5	2	2	5
Canton, Ohio	40	22	12	4	-	2	1
Chicago, Ill.	328	188	87	32	8	13	19
Cincinnati, Ohio	U	U	U	U	U	U	U
Cleveland, Ohio	129	81	29	11	4	4	1
Columbus, Ohio	205	152	35	12	1	5	18
Dayton, Ohio	116	80	24	6	5	1	9
Detroit, Mich.	191	95	59	25	6	6	17
Evansville, Ind.	56	40	13	1	1	1	5
Fort Wayne, Ind.	58	44	10	3	-	1	7
Gary, Ind.	U	U	U	U	U	U	U
Grand Rapids, Mich.	54	39	8	2	1	4	7
Indianapolis, Ind.	254	169	56	11	9	9	11
Lansing, Mich.	51	40	9	-	1	1	3
Milwaukee, Wis.	111	76	26	4	1	4	6
Peoria, Ill.	58	42	10	2	-	4	3
Rockford, Ill.	57	42	8	5	2	-	2
South Bend, Ind.	39	35	2	2	-	-	1
Toledo, Ohio	104	84	12	5	1	2	8
Youngstown, Ohio	60	45	11	4	-	-	1
W.N. CENTRAL	626	418	115	63	18	12	60
Des Moines, Iowa	98	67	26	4	-	1	12
Duluth, Minn.	30	20	9	-	-	1	2
Kansas City, Kans.	39	25	5	7	2	-	2
Kansas City, Mo.	108	70	20	14	1	3	12
Lincoln, Nebr.	36	28	6	1	-	1	2
Minneapolis, Minn.	57	36	13	5	1	2	8
Omaha, Nebr.	75	57	8	6	2	2	4
St. Louis, Mo.	U	U	U	U	U	U	U
St. Paul, Minn.	52	42	6	3	1	-	9
Wichita, Kans.	131	73	22	23	11	2	9
S. ATLANTIC	1,311	830	306	97	54	23	76
Atlanta, Ga.	192	88	32	32	28	12	9
Baltimore, Md.	175	98	55	16	6	-	9
Charlotte, N.C.	107	73	25	7	1	1	6
Jacksonville, Fla.	150	92	41	6	8	2	15
Miami, Fla.	73	52	18	2	1	-	9
Norfolk, Va.	50	33	11	1	3	2	6
Richmond, Va.	60	40	15	3	1	1	3
Savannah, Ga.	46	32	11	2	1	-	6
St. Petersburg, Fla.	57	46	10	1	-	-	3
Tampa, Fla.	186	133	38	10	3	2	-
Washington, D.C.	199	131	47	16	2	3	7
Wilmington, Del.	16	12	3	1	-	-	3
E.S. CENTRAL	962	629	211	67	35	19	88
Birmingham, Ala.	155	98	34	11	8	3	21
Chattanooga, Tenn.	114	84	24	4	2	-	8
Knoxville, Tenn.	101	69	22	5	-	5	13
Lexington, Ky.	77	50	19	5	2	1	10
Memphis, Tenn.	221	149	39	20	8	5	26
Mobile, Ala.	88	59	17	5	6	1	1
Montgomery, Ala.	57	35	16	4	2	-	3
Nashville, Tenn.	149	85	40	13	7	4	6
W.S. CENTRAL	1,501	966	314	126	48	47	117
Austin, Tex.	91	61	18	6	2	4	4
Baton Rouge, La.	7	3	1	2	1	-	-
Corpus Christi, Tex.	89	64	12	9	1	3	4
Dallas, Tex.	222	128	61	20	4	9	24
El Paso, Tex.	86	67	12	5	-	2	6
Ft. Worth, Tex.	121	84	21	6	5	5	6
Houston, Tex.	404	235	88	46	24	11	32
Little Rock, Ark.	68	40	16	3	4	5	3
New Orleans, La.	U	U	U	U	U	U	U
San Antonio, Tex.	230	148	54	19	5	4	19
Shreveport, La.	57	44	8	2	2	1	7
Tulsa, Okla.	126	92	23	8	-	3	12
MOUNTAIN	926	642	184	56	20	24	81
Albuquerque, N.M.	122	87	23	8	2	2	14
Boise, Idaho	60	51	5	2	1	1	8
Colo. Springs, Colo.	68	48	5	8	4	3	5
Denver, Colo.	118	72	29	8	1	8	7
Las Vegas, Nev.	244	154	67	12	4	7	19
Ogden, Utah	20	14	3	1	2	-	3
Phoenix, Ariz.	U	U	U	U	U	U	U
Pueblo, Colo.	36	27	8	-	1	-	2
Salt Lake City, Utah	111	75	24	8	2	2	13
Tucson, Ariz.	147	114	20	9	3	1	10
PACIFIC	1,412	996	288	63	36	28	114
Berkeley, Calif.	22	16	5	1	-	-	3
Fresno, Calif.	133	102	21	4	4	2	9
Glendale, Calif.	27	19	7	1	-	-	2
Honolulu, Hawaii	83	67	12	1	3	-	8
Long Beach, Calif.	62	48	13	1	-	-	10
Los Angeles, Calif.	404	273	79	25	16	11	23
Pasadena, Calif.	27	22	4	1	-	-	4
Portland, Oreg.	U	U	U	U	U	U	U
Sacramento, Calif.	U	U	U	U	U	U	U
San Diego, Calif.	154	110	26	9	2	6	10
San Francisco, Calif.	U	U	U	U	U	U	U
San Jose, Calif.	198	144	38	7	3	6	21
Santa Cruz, Calif.	27	22	5	-	-	-	2
Seattle, Wash.	119	66	37	10	4	2	8
Spokane, Wash.	61	43	14	2	1	1	10
Tacoma, Wash.	95	64	27	1	3	-	4
TOTAL	11,533¶	7,748	2,414	778	314	262	842

U: Unavailable. -:No reported cases.

* Mortality data in this table are voluntarily reported from 122 cities in the United States, most of which have populations of >100,000. A death is reported by the place of its occurrence and by the week that the death certificate was filed. Fetal deaths are not included.

† Pneumonia and influenza.

§ Because of changes in reporting methods in this Pennsylvania city, these numbers are partial counts for the current week. Complete counts will be available in 4 to 6 weeks.

¶ Total includes unknown ages.

All *MMWR* references are available on the Internet at http://www.cdc.gov/mmwr. Use the search function to find specific articles.

Use of trade names and commercial sources is for identification only and does not imply endorsement by the U.S. Department of Health and Human Services.

References to non-CDC sites on the Internet are provided as a service to *MMWR* readers and do not constitute or imply endorsement of these organizations or their programs by CDC or the U.S. Department of Health and Human Services. CDC is not responsible for the content of these sites. URL addresses listed in *MMWR* were current as of the date of publication.

The *Morbidity and Mortality Weekly Report (MMWR)* Series is prepared by the Centers for Disease Control and Prevention (CDC) and is available free of charge in electronic format and on a paid subscription basis for paper copy. To receive an electronic copy each week, send an e-mail message to *listserv@listserv.cdc.gov*. The body content should read *SUBscribe mmwr-toc*. Electronic copy also is available from CDC's World-Wide Web server at *http://www.cdc.gov/mmwr* or from CDC's file transfer protocol server at *ftp://ftp.cdc.gov/pub/publications/mmwr*. To subscribe for paper copy, contact Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402; telephone 202-512-1800.

Data in the weekly *MMWR* are provisional, based on weekly reports to CDC by state health departments. The reporting week concludes at close of business on Friday; compiled data on a national basis are officially released to the public on the following Friday. Address inquiries about the *MMWR* Series, including material to be considered for publication, to Editor, *MMWR* Series, Mailstop C-08, CDC, 1600 Clifton Rd., N.E., Atlanta, GA 30333; telephone 888-232-3228.

All material in the *MMWR* Series is in the public domain and may be used and reprinted without permission; citation as to source, however, is appreciated.

☆U.S. Government Printing Office: 2003-533-155/69109 Region IV

DEPARTMENT OF HEALTH AND HUMAN SERVICES
CENTERS FOR DISEASE CONTROL AND PREVENTION (CDC)
ATLANTA, GA 30333

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE $300
RETURN SERVICE REQUESTED

0206 93036 T15614DS 0001
PROQUEST INFORMATION & LEARNING
PERIODICALS ACQUISITION
PO BOX 1346
ANN ARBOR MI 48106-1346

FIRST-CLASS MAIL
POSTAGE & FEES PAID
PHS/CDC
Permit No. G-284